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# Murray Darling Basin Regional Economic Diversification Program

**A review of equity capital investment in the  
development of high value horticulture**

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# Executive Summary

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This report is part of the Murray Darling Basin Regional Economic Diversification Program - Queensland. The Agricultural Value Chains and Food Systems group at the University of Southern Queensland was commissioned by Queensland Department of Agriculture and Fisheries to review capital investment for the development of high value horticulture in the Queensland Murray Darling Basin (QMDB).

The research has three objectives:

- To better understand the capital needs of Queensland Murray Darling horticultural producers in supporting their expansion, diversification or infrastructure development plans;
- To provide information relevant to QMDB producers on partnering with investors; and
- To overview investment opportunities for the QMDB region and how economic diversification of the region might be progressed through investment of capital from outside of the region.

The methodology used for this report involves a qualitative 'multi-stakeholder analysis' using in-depth interviews with stakeholders across the horticulture investment chain.

First, we interviewed producers in the Murray-Darling region involved in establishing new ventures for their views on capital raising. The producers were established horticultural producers or other crop growers (e.g. cotton) looking to diversify into horticulture or new horticultural crops. The region's main attribute is a secure water supply and dry sub-tropical climate. Suitable infrastructure for cold storage, packing and/or processing of horticulture produce is limited.

These interviews indicated that the region's producers are interested in capital raising beyond bank loans, but they had little to no understanding of the process and the requirements involved. Most had made a start at a new venture but were still some time away from production supply to a market.

Second, we interviewed agricultural investment professionals as well as producers from other regions that have had positive and negative experiences in equity capital raising. Our results indicate that there are substantial differences in the perspectives of producers and investors. Cultural change is needed for producers and investors to work together. Agricultural investment professionals have an important role to play in educating both parties about the other and bringing them together.

Potential investors and their motivations are diverse. They include institutional investors such as superannuation funds and private equity funds, private

investors such as family offices and high net worth individuals, and corporate investors seeking access to supply of produce for their business.

Investment in horticulture to date has focused on perennials where risks can be more easily mitigated compared to annual crops that are subject to weather, volatile markets and rapid changes in supply. Investment in other horticulture products is evolving and may be linked to export market opportunities.

Producer options include:

- Expansion - Entering into an agreement with an external equity investor, pooling resources with strategically aligned businesses or leasing additional land

- Exit - Selling the farm and possibly staying on as a manager or in a lease-back arrangement

- Business as usual or steady growth/diversification utilising traditional sources of finance

Some investors are interested in the first option (investing and becoming a business partner) as well as buying farms outright. Sometimes multiple farms are purchased by investors and aggregated into a large farming enterprise. Investors interested in sharing in an existing business look for large, profitable farming enterprises; skilled and experienced farm management; access to a secure water supply; business and financial proficiency of the owners; a comprehensive business plan outlining future growth strategies; and a good fit with their needs and motivations – the right partner.

The main reason to consider taking an equity investor is to enable a growth strategy. This could involve overcoming constraints associated with bank finance or partnering with a strategic investor to add value to both businesses. However, the process of becoming 'investment ready' is a long road and likely to be many years in development. It will require some rethinking of the way the business is operated and presented, which would generally benefit from some professional advice. There is a need to help producers to build the required finance and business skills.

Producers wishing to introduce external equity capital into their farming enterprise need to have a clear business plan for the future and a strategy for how to achieve it. They need to understand what they want from an investor and what they will need to give in return. Potential impacts of taking external equity investment include dilution of returns, potential loss of control and the complexity associated with dealing with a third party. In most cases operational control of the business remains with the producer while the investor is involved in strategic decisions, regardless of whether the investor owns more or less than 50% of the business.

We conclude that the region's high value horticultural production is in an early stage of development and will require considerable effort and capital over a

period of time. Investment from outside the region will be needed to drive the majority of development. Investment is needed to develop and increase the scale of high value horticulture production and related infrastructure such as storage, packing and processing facilities.

While some of this may be undertaken by the region's existing producers, it is expected that investors from outside the region will drive the majority of this development. These investors are likely to include large or corporate horticultural producers investing in the region as a strategic move to increase and/or diversity their production and packing operations. Other investors are unlikely to have expertise in horticulture production and will need to recruit farm managers with the necessary experience and expertise to manage large scale production.

QMDB growers wishing to participate in the development of high value horticulture could consider partnering with investors from outside the region through external equity finance or a joint venture arrangement.

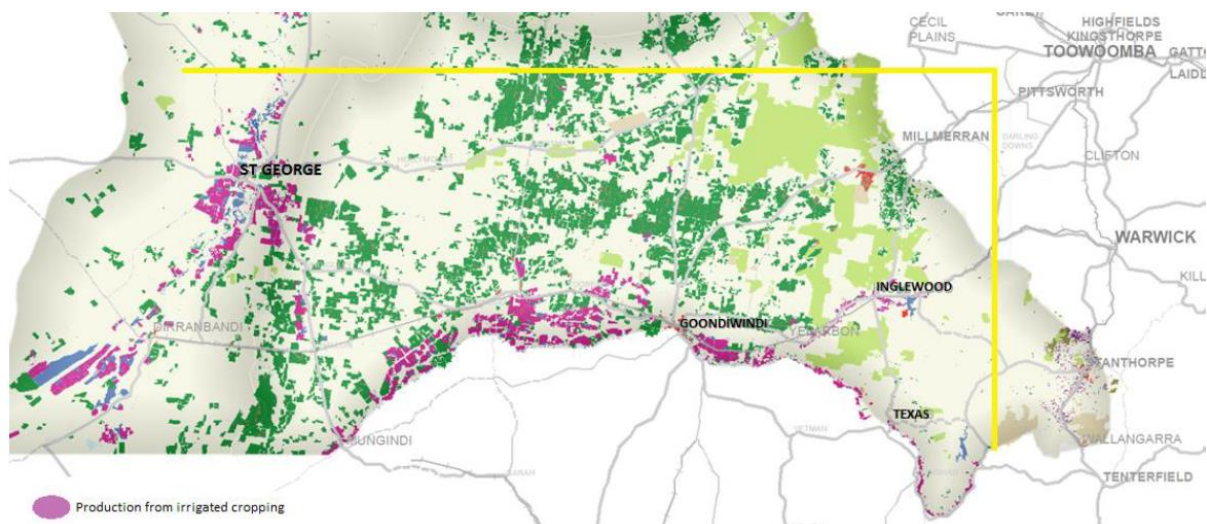
# 1. Introduction and Objectives

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Australian horticulture represents a high value industry estimated to be around \$8.9billion in 2013-14 with significant potential for export earnings and the delivery of a return to investors (ANZ 2015). In order to realise this opportunity, the industry will require increased investment for development of production and infrastructure.

Australia has a number of regions capable of high volumes of horticultural production for the export market, including south western Queensland. This report examines how the development of high value horticulture in the Murray Darling Basin region might be progressed through investment of additional capital from outside the region.

This report is part of a series of reports prepared on the Murray Darling Basin Regional Economic Diversification Program. Queensland's Murray Darling Basin extends from St George in the west through to Inglewood in the east and has significant irrigated cropping areas that are producing a variety of cotton, grain and horticulture crops (Map 1). The recent opening of an international freight capable airport at Toowoomba further enhances the region's potential to derive economic benefit from exports of high value horticulture products to Asia.



Map 1: Queensland Murray Darling Basin Economic Diversification Project Region

A range of vegetable and fruit crops can potentially be grown in the region, and these are overviewed in Appendix 1. The horticultural crops that are currently grown include grapes for table and wine usage, onions, pumpkins, olives, lavender and stone fruit. In addition, there are a number of crops that are being developed in the area and these include limes, mandarins, garlic and blueberries. Suitable infrastructure for cold storage, packing and/or processing of horticulture produce is limited.

An expansion of production scale and infrastructure will require a substantial injection of capital. There is an opportunity for some of the region's growers to participate in this development through partnering with investors from outside the region. Other growers will choose to sell their land and water assets to investors that see an opportunity to make a profit from developing horticultural production and infrastructure.

The primary focus of this report is to provide relevant information to those existing growers wishing to participate in the development of high value horticulture in the region through external equity investment. It is important to note that this option is not available or indeed desirable for everyone.

## ***Report Objectives***

### ***Objective 1***

The first objective for the research is to better understand the capital needs of Queensland Murray Darling horticultural producers in supporting their expansion, diversification or infrastructure development plans.

### ***Objective 2***

Second, the report will provide information relevant to QMDB producers on partnering with investors including:

1. Who are the potential investors; what are the alternatives; where does investor interest lie; are different investor groups interested in particular crops; are some horticulture crops more suitable for equity investment than others?

2. What would be the impact of taking external equity investment on the business (advantages and disadvantages, including experiences of producers who have gone down this track);
3. What would producers need to do to become investable/investment ready?

### ***Objective 3***

The third objective is to overview investment opportunities for the QMDB region and how economic diversification of the region might be progressed through investment of capital from outside of the region.

### ***Scope of the Research***

This report explores the opportunities for alternative capital raising aside from that of traditional debt finance offered by banks. It compares the needs of growers and potential investors in the horticulture industry. It summarises investor requirements, and draws on the experiences of growers that have partnered with investors to finance an expansion of production.

The report will not cover small unregulated investments such as 'crowd-funding' or debt finance (bank loans). Interviews with a sample of QMDB producers confirmed that they already have sufficient information about bank loans but were interested in learning more about equity capital.

While collaborative business models such as co-operatives, collaborative family farms and strategic joint ventures are mentioned in this report, an in depth investigation of these business models is beyond its scope.

### ***Contents of the Report***

The next section overviews the research methodology. This is followed by a brief review of prior research relevant to the topic of equity investment in Australian horticulture. The following sections report the insights gained from interviews with QMDB producers, agricultural investment professionals and producers from other regions that have experience with external equity investment. Section 6 provides an investment roadmap for development of the QMDB, while Section 7 contains conclusions and key messages.



## 2. Methodology

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The horticultural industry is complex with multiple driving factors including production options, market demand, resource requirements, risk profiles and management systems. The financial system is also complex, making the interaction of these two systems and how people work in them quite difficult to interpret and understand. There are many potential problems and many potential solutions. This research aims to make sense of this complex mesh of systems.

The methodology used for this report involves a qualitative 'multi-stakeholder analysis' using in-depth interviews with stakeholders across the horticulture investment chain (Woodhead et al. 2000). We have specifically sought to encourage open discussion of their experiences and views about capital raising. This type of analysis helps us to understand and bring together the perceptions of horticulture and finance industry stakeholders (Woodhead et al. 2000; Woodhead et al. 2009).

### ***Phase 1 - Research Context***

The research was conducted in three phases. The first phase involved gaining an understanding of the research context through:

- A literature review of relevant information from published reports and websites;
- Interviews with QMDB producers that have started new ventures.

Seven QMDB producers were interviewed, including some of the organisations that received funding through the MDB Regional Economic Diversification Program. The focus of the interviews was to determine:

1. What are the needs of QMDB producers in regards to their options for expansion or diversification?
  - a. What are their views on capital raising aside from debt capital?
  - b. What is their capacity for finding external equity capital?
  - c. How prepared are they for taking on external equity capital?
2. What are the differences in regards to their plans for exit, growth or continuing with business as usual?

3. What information are they looking for in regards to capital raising, including whether they require information on debt capital as well as equity investment?

The results of phase 1 of the research informed phases 2 and 3.

## ***Phase 2 – Understanding the Investment Environment and Equity Co-Investment***

The focus for this phase of the research was to understand:

1. Who are the potential types of investors?
  - a. What is their perspective?
  - b. Where does their interest lie?
2. What are the gaps between investor and grower requirements and perspectives?
3. What would be the impact for a producer to take an external equity investor into the business?
4. What would producers need to do to be investment ready?

Two groups of stakeholders were interviewed for this phase of the research:

- Investment professionals (13)
- Producers from other regions that have experience with raising equity capital or commenced the journey towards it (5)

The 13 investment professionals included 4 specialist agricultural investment advisors, 3 agricultural specialists from accounting or consulting firms, 2 farm management groups, 1 agribusiness banker, 2 agricultural fund managers and 1 finance manager of a business involved in supply chain investment. One of the specialist agricultural investment advisors and the supply chain investor are involved solely in horticulture, while the remainder of the sample have broader agricultural expertise including horticulture.

A snowballing sampling process was used. Interviewees were initially identified through contacts of the project team. These participants were then asked to provide names and introductions to other suitable people for interview. Each interview was recorded and transcribed.

Thematic Analysis was used in the examination of transcripts of recorded interviews using key word searches. The topic areas were coded based on the research objectives and the issues emerging from the interviews. This approach emphasizes the participants' perceptions as well as the knowledge that they have accumulated from working in agricultural finance. It compares investor and grower perspectives to determine substantial differences. The perception of growers and investors (including the investment professional as intermediaries) are grouped across the following themes:

1. Business goals
2. Governance & reporting
3. Scale of operation
4. Investment in horticulture
5. Roles and cultural fit
6. Investment readiness and expected impacts

### ***Phase 3 –Development of Horticulture in the QMDB***

In this final phase of the research, the insights gained from phases 1 and 2 were applied to the QMDB setting to reach conclusions about avenues for progressing opportunities for the development of horticulture in the QMDB.

### 3. The Australian Horticulture Industry

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Horticulture is a high input and complex industry with potentially good return on investment for key markets in the Asia-Pacific (ANZ 2015). According to Christy et al. (2009) financial services is considered one of the 'key enablers', amongst nine others for the development of agricultural industries. The high input requirements of horticulture in particular demands significant capital investment to establish or expand a production system. In some cases, such as with tree crops, there may be a 10-year window to achieving maximum production capacity. The growing demand for food and fibre is why banks and investors consider the farming and agribusiness sector a key investment portfolio (IFC, 2012). However due to farm production risk not always being clearly understood by external investors, the farm and agribusiness sectors have sometimes struggled in the search for a sustainable financing model to suit its complex business arrangement and financing needs (Johnson et al. 2009).

This section of the report considers the current state of the Australian horticultural industry, its challenges in regards to capital raising and the horticulture crops currently on the investment radar.

#### ***Why Invest in the Australian Horticulture Industry?***

Horticulture is the third largest agricultural sector in Australia producing an approximated gross value of production (GVP) of \$8.9 billion in the year 2013-14 (ANZ, 2015). Australia's horticulture industry is recognised as highly reputable at national and international level for its product and processing quality across all stages of the supply chain, from farm to consumer (HIA, Consultation paper, 2015). The Australian industry has seen significant growth over the past five years with a 20% growth in the fruit and nut segment, 12.9% in the vegetable segment and 11.6% in the grape segment (ANZ 2015). Much of the current production is targeted for the domestic market with potential to significantly grow the export market having an advantage in counter seasonal availability and food safety.

Austrade (2015) has identified some potential investment opportunities around Australia and these include:

- Investing in the consolidation of smaller farms through acquisitions
- Investing in the development of new production regions (e.g. Queensland's Murray Darling Basin Region)
- Investing in production systems to minimise climate risk and ensure continuity of supply for domestic and export markets
- Investing in developing 'convenience' products to capture value and minimise wastage
- Investing in local production to replace imports of high-value products
- Investing in the export of high-value fresh products to affluent Asian markets
- Investing in technologies to reduce processing costs and improve export capability

### ***Challenges in Australian Horticulture***

According to the ANZ Australian Horticulture Industry report, sustainable profitability is still a major challenge requiring investment that will lead to improved productivity and strategic growth (ANZ 2015). The Australian Bureau of Agricultural Resource Economic and Sciences (ABARES) report that from 2006 to 2013 the total ratio of receipts to cost for the vegetable industry has declined from 1.5 to 1.2, with the best performers being the larger farms (>70 hectares) in terms of cash income. The Australian Horticultural Exporters Association has recommended that the industry should pay closer attention to sourcing private capital. This would require finance specialists with horticulture knowledge to assist the industry with establishing alternative business structures for farm ownership.

One of the key challenges being faced by Australian producers is the increased debt levels and access to sufficient finance to support growth and farm turnover. Current trends suggest that working capital is increasing relative to land debt, plant and machinery purchases (Figure 1). This puts farms at greater risk of escalating debt on debt in times of poor seasons resulting in crop failures (ABARES 2013).

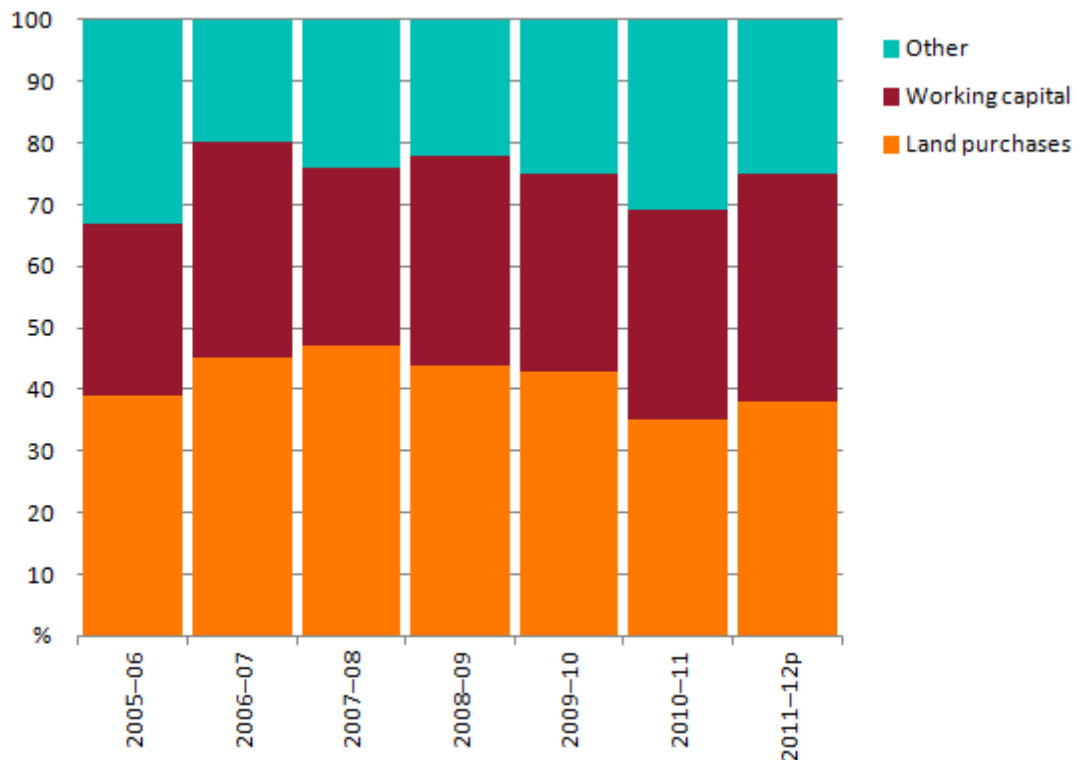


Figure 1: Composition of farm debt, source ABARES, Australian vegetable growing farms and economic survey, 2012-13

Due to a trend of poor cash incomes at farm level, the loan repayment capacity of producers has declined over time which has forced farms to increase their working capital debt over the period 2006-2013. In addition, HIA (2015) has suggested the reasons that horticultural farms have not been able to access external capital investment are related to:

- Aging grower population
- Small size of operation
- Impacts of price volatility
- Supply volatility

Regardless of these shortcomings the horticultural industry as a whole is experiencing an increase in demand with further potential for export given increasing market access through selected trade agreements. Total horticultural exports in 2014 were valued at \$1.44 billion, a 60% increase in the value of horticulture exports from two years ago (OHMA 2014). At present it appears the industry lacks sufficient scalability to drive the productivity suggested in the ANZ 2015 horticultural report. Small producers are becoming less efficient based on the ABARES data and are on an increasing risk trend.

### ***Horticultural Crops on the Export Radar***

Currently at the top of the list of interest to investors are berries and tree nuts, rather than the staple vegetables. Various other fruits are also on the radar of investors, but they might need a point of differentiation and careful attention should be paid to market demand.

Tree nut production in Australia is currently dominated in scale by almonds and macadamias, with these two crops accounting for more than 50% of the total tonnage produced. Macadamia being 30% of tonnage produced. The crop is forecast to increase by about 44% by 2025, based on current plantings.

Other tree nuts such as hazelnuts are also about to become part of mainstream production with 5,000% growth predicted over the next decade. Walnuts, already on a growth trajectory and pistachios will more than double in output; whilst chestnuts and almonds are expecting increases of more than 30%.

Overall, the farm-gate value of Australian tree nuts is forecast to increase by 82% by 2025. This is largely driven by external demand and the industry is expected to surpass \$1billion in export sales before 2025 (Australian Nut Industry Council 2014).

Similarly, the area under blueberry production in Australia has more than doubled since 2007 to 1100 hectares based on the market demand for healthy blueberries, newer varieties and improved production techniques. There is increasing global demand for blueberries which is likely to support investment. Australia is well placed supplier having built a reputation on its clean, green, high quality and safe food image.

Other potential exports are things like pomegranate which is still little known but worldwide there is a certain amount of research being undertaken into the health benefits protecting against a range of diseases. A major breakthrough in health interest could quickly create significant demand. Globally the market is expanding and it is anticipated that Australia will follow this trend. India produces 50% of global production, with Iran the second largest producer with estimated 55,000 ha's in production and another 6,500 ha's still to bear. The United States has in total about 6000ha and is projected to increase to 10,000ha over the next 3-4 years. Currently global demand is outstripping supply and the

potential for Australia is largely based on our counter-seasonal ability to supply a market that is already consuming 2M tonnes.

A range of other traditional horticultural crops that are exported include citrus, pome fruits, stone fruits, vegetables and cucurbit crops but it is important to have an intended market established. Australia's cost of production is relatively higher than a number of other exporting countries which can have a significant impact on profitability. Perishable crops are also vulnerable to loss of quality in transit and benefit from having a clear market destination to minimise time in the supply chain. Investors with access to an existing market make ideal partners for horticulture if they can negate the market risk.



## 4. Queensland Murray Darling Basin Horticulture Producer Overview

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We interviewed producers establishing new ventures in the Murray-Darling region for their views in regards to capital raising. The producers were established horticultural or other crop growers (e.g. cotton) looking to diversify into horticulture or new horticultural crops. Most had made a start at a new venture but were still some time away from production supply to a market. The region's main attribute is a secure water supply and dry sub-tropical climate. On the negative side for the region is the distance from market and a lack of a well-established and versatile transport infrastructure.

### ***Grower Views on Capital Raising and Sharing Equity in the Business***

Most of the producers we interviewed did not have sufficient capital available to significantly invest in the new production venture they were trialling. All producers we interviewed except for a corporate family farm indicated that they were familiar with debt finance from banks, but had little knowledge about other forms of capital. Nearly all producers were keen to explore other means of raising capital. They wanted to know how external equity investment models would fit into a family farm model.

Very few producers were accepting of sharing the equity in their farm in order to raise the required capital. They spoke of their concerns about the loss of control and the potential of them being sold up in the event of a business failure. They did not want to lose the farm, which for producers is considered more than a means of income but more in the way of a home.

Others were more concerned about inter-generational transfer and saw themselves as close to retirement and not wishing to take on any new challenges. They were not contemplating expansion unless it was of interest to the farm's next generation.

Leasing of land was considered only as a short term option while awaiting a future decision; a factor of little interest to investors. In the longer term, sale of

the land was seen by producers as a preferred option to leasing as most did not believe that leasing provided sufficient returns.

### ***Assessment of Current Preparedness***

It was hard to determine how much market research the producers had done in the consideration of their new venture. One interviewee had directly indicated that they had no knowledge of the next step if early trials proved successful. Their knowledge was based around production rather than markets. Some producers were approached directly by corporate investors to test products on their behalf with a view to participate in later expansion, while others had indicated they had little knowledge of the market beyond the point of production. Many indicated a preference for local markets based on its familiarity and simplicity. The requirement to meet export certification seemed too daunting and export was preferably left to someone else in the supply chain. This lack of personal knowledge about post farm gate supply chains was a source of concern to producers in regards to trusting external advisers.

### ***Grower Views on Investors & Investment Professionals***

All the producers we interviewed had little knowledge about investors in the market place, and consequently had no knowledge of their requirements or where to find them. They were more familiar with someone coming to them with a proposal, rather than them having to draft the proposal to attract investors. Most of the interviewees professed they did not have the means to put such a project prospectus together.

Although the producers were familiar with crop consultants, they were less familiar with agribusiness investment professionals and were unaware of how to contact them. Some indicated concern over past failures of horticultural ventures and as such they were likely to take a very conservative stance in terms of accepting any significant investment.

Many expressed an interest in a preference for working in partnership with known locals rather than unknown investors. Learning to trust external partners may be an issue for future expansion requiring equity capital. Even though a

number of the producers interviewed have worked with other producers in cooperatives they had not worked as a team jointly sharing responsibility over a business unless it was with family members.

The potential for the formation of grower collectives in the QMDB area is still rudimentary with only ad hoc discussions occurring and almost no real structured plans in place to market products. It is possible that such groups may form in response to the needs of investment.

### ***Points of Difference***

The most marked point of difference between the interviewees in the region was generational variation in perspective. Younger producers were far more interested in considering external investment; they were also more flexible in wanting to meet the expectation of investors. They indicated that they were unlikely to meet bank expectations of sufficient equity to qualify for required borrowings to operate a commercial farm. They had a belief in their own skills but felt limited by a lack of available capital.

Older producers were far more risk adverse in regards to external equity. Some did not see value in the effort associated with expansion, preferring to aim for a niche market as a diversification strategy. They had concerns about inter-generational equity and would require the support of the next generation to be involved in any major expansion.

Corporate family farms were also markedly different in their outlook, being more open to future ventures that met their business goals. They have accepted the concept that in a large operation “you cannot be everything”. They could more easily meet the requirements for strategic joint ventures.

### ***Summary***

Overall we perceived that the producers we talked to in the region were certainly interested in alternative capital raising, but they had little to no understanding of the process and the requirements involved. A possible issue is that for many producers in the region the level of capital they were considering could not be clearly expressed and the indications was that it was in the smaller category

level, which is less than \$1million. This was in part due to a lack of a structured 10-year plan of what the business was aiming for and the associated budget required.

## 5. Farm and Agribusiness Financing in Australia

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This section overviews farm and agribusiness financing in Australia and how external equity has operated to date, including the different types of investors and their motivations. Several investment models are described and compared, with an emphasis on equity finance and joint ventures. Barriers to investment, including important difference between producers and investors are considered. The information presented in this chapter is based on prior research as well as insights gained from interviews with agribusiness investment professionals.

### 5.1 Types of Debt and Equity Capital

Capital to finance the farm business generally comprises a combination of debt and equity.

#### ***Debt Capital from Banks and Trade Finance***

The banking industry has been a critical component of the agriculture sector since the late 1800s, working with producers and farming businesses in rural and regional Australia (Australian Bankers' Association, ABA, 2014). A recent Farm Finance Forum has proposed building the financial resilience of Australian farm businesses by diversifying financing options to include equity as well as debt finance (NFF, 2014). Bank finance has limitations when it comes to funding large scale expansion of the farm business, and these are determined by the ratio of debt to internal equity. That is, there is a ceiling on the amount of bank debt that can be obtained which is calculated as a percentage of the internal equity of the business.

Trade finance is similar to bank debt, used for agricultural commodities in international trading, typically at pre- export stage (Advisors, 2015). In Australia trade finance is primarily provided by suppliers, such as those selling farm inputs and machinery (e.g. Elders or Landmark), with limited involvement from buyers of production (KPMG, 2013).

### ***Internal Equity***

This constitutes the capital from the pockets of owners and family equity. It is grown through a combination of asset appreciation and retained earnings (KPMG, 2015). A scenario might be that various members of the family invest their equity share in the farm but do not actually work in the business. They would still have a stake in the profit and any potential capital gain. Having multiple family shareholders requires a very considered business structure and reporting systems to ensure harmony. The risk is that an individual family shareholder may wish to sell their share for investment elsewhere but other members of the family are not in a position to buy them out without limiting the business with an increased debt burden (Hicks et al. 2012). Internal equity is principally about maintaining the status quo and is usually insufficient to really extend the business to a level where it can capitalise on new opportunities.

### ***External Equity Finance***

External equity is capital that originates from investors external to the family farming business (Wang et al, 2002). It involves an equity arrangement between the internal (family) equity of the farm and an outside investor. Traditional sources of external equity as proposed by Warlick (2012) include high net worth individuals (private investors), superannuation funds and agricultural investment funds. Institutional investors are entities that have large amounts capital to invest, such as mutual funds, insurance companies, superannuation funds, investment banks, and endowment funds (Fernando, Schneible et al. 2014).

### ***The Operation of External Equity Finance in Agriculture***

It is usual in every economic setting, including agriculture, that a family dominant business model initially raises capital from internal sources and debt sources. However, for accelerated growth of the business, external equity capital is generally required (Cooper et al, 1994, Castrogiovan 1996, Venkatraman and Van de Ven 1998). In addition to a direct capital injection for growth, equity investors can also facilitate benefits to the business. These can include a network of investors, buyers, suppliers and potential business joint venture partners (Timmons and Bygrave 1986, Sapienza 1992, Sapienza et al. 1996.). External

equity considerably extends the opportunities for the business to expand the size of their operation. This is currently a small but growing sector in financing Australian agribusinesses.

External equity, which is relatively infinite in supply, offers the greatest potential for new funding and investment in agriculture (KPMG, 2013). Food and agribusiness assets have been gaining recent attention by institutional investors due to their strong fundamentals (Advisors 2015).

## 5.2 The Investment Environment

There are three main types of investors in Australian agriculture:

- Institutional investors such as superannuation, agricultural or private equity funds
- Private investors including high net worth individuals and family offices
- Strategic or corporate investors interested in securing supply

The investment motivation and scale sought by these different types of investors are summarised below (Table 1).

*Table 1: Investor Types and their Characteristics*

<b>Investor types</b>	<b>Motivation</b>	<b>Scale of investment</b>
<b>INSTITUTIONAL:</b> <ul style="list-style-type: none"> <li>- Pension fund</li> <li>- Private Equity Fund</li> <li>- Investment Fund</li> </ul>	<ul style="list-style-type: none"> <li>- Return on Investment</li> <li>- Diversification to manage risk</li> </ul>	\$30 – 250 Million
<b>PRIVATE INDIVIDUAL:</b> <ul style="list-style-type: none"> <li>- High Net Worth individual</li> <li>- Family Office</li> </ul>	<ul style="list-style-type: none"> <li>- Return on Investment</li> <li>- Diversification to manage risk</li> </ul>	\$2 – 25 Million
<b>CORPORATE/BUSINESS</b> <ul style="list-style-type: none"> <li>- Supply line investor</li> </ul>	<ul style="list-style-type: none"> <li>- Access to supply</li> </ul>	As available to pursue strategy

Investors may be domestic or international, with the majority of international investment coming from North America, Europe and Asia. The scale of

investments ranges from \$3-25 million for private investors, through to \$250 million or more for large institutional investments. The process of matching investors to farms is managed by agricultural investment professionals who hold knowledge of both groups of stakeholders.

Private equity funds tend to invest for periods of between four and seven years. Superannuation funds and private individuals are likely to invest for longer terms. Investment by private individuals is often referred to as direct investment, while investment through a fund is indirect since the fund manages the monies of many individual investors and these investors do not have any direct involvement with the farm business.

### 5.3 External Equity Models

There are several forms that the investment can take including:

- *Acquisition* – where the investor purchases the property outright and the grower either exits the business, leases it back for a fee and continues operating it, or stays on as an employed farm manager working for the new owner; or
- *External equity investment. Two of the major models are:*
  - o *Equity finance* – an arrangement between the existing owners and investors where control and ownership of the farming enterprise is shared between both parties working together for mutual gain; and
  - o *Joint venture* – a business arrangement in which the grower and one or more parties agree to pool their resources for the purpose of accomplishing a specific project or any other business activity.

External equity is deployed through a range of corporate farming structures (Table 2) and may involve separating the ownership of the farm business between land and operations (Agrifood Skills Australia, 2015; KPMG, 2013).



Table 2: Common corporate farming models (Source: Adapted from Agrifood Skills Australia 2015)

Model	Overview	Current Trends
1. Listed company	Agricultural companies listed on the stock exchange.	Contracting in number after PrimeAg was wound up in late 2013 and the majority of its assets sold to US pension fund TIAA-CREF. Listed agriculture companies in Australia and internationally are likely to remain a very small proportion of overall listed enterprises.
2. Managed investment schemes (MIS)	A variety of structures based on collective investment in a common enterprise.	Decreasing in popularity after the scandals associated the collapse in 2009 of Timbercorp and Great Southern – the two of the biggest listed MIS companies in Australia – as well as the ATO ruling in 2007 that impacted horticulture.
3. Equity finance	An equity investor, such as a superannuation scheme or a private equity fund, invests in corporate farming operations either directly or as a partnership.	Increasing in popularity but primarily among large farm businesses – still not very common.
4. Equity partnership or joint venture	A joint venture between related or nonrelated individuals who have come together to pool their capital and possibly skills to enable the partners to obtain revenue and growth from their investment.	Yet to gain the same levels of popularity as in New Zealand despite several predictions over the past five years to the contrary.

Listed companies and managed investment schemes have low uptake or declining popularity, while equity finance and joint ventures are relatively new models that are gaining popularity.

Producers should make themselves aware of the pros and cons of each external equity structure. External equity structures such as leasing are common, relatively standardized and understood by industry stakeholders; however, most structures are not (KPMG, 2013).

### ***Equity Finance***

Equity finance in the family farming context represents a private agreement between the producer and investor and involves selling shares in a private company for an agreed price rather than a public company whose shares are listed and sold on a stock exchange.

Equity finance is a source of investment capital from high net worth individuals or institutions for the purpose of investing and acquiring equity ownership in companies. Institutions include superannuation funds, agricultural investment funds and private equity firms. Private equity firms raise funds and manage these monies to yield favourable returns for their shareholder clients, typically with an investment horizon between four and seven years.

To raise equity finance an agribusiness creates a corporate or stapled (trust plus company) structure and issues new shares which are sold to an institutional or private investor for cash (Cameron 2016). The new share owners become part-owners of the company and share in the risks and rewards of the company's business. A shareholder agreement is used to formalise the arrangements and should specify all important aspects including how the company will be funded, governed and managed.

Corporate structures involve a company (or could be unit trust) that holds the underlying business. Formation of a stapled structure requires a trust which holds the assets and leases them across to a company which conducts the active business, where the units in the trust and the shares in the company are stapled together. Asian investors and Australian corporates tend to prefer corporate structures, while foreign investment funds and private equity prefer stapled structures (Cameron 2016). Expert advice should be sought regarding the tax implications of different structures.

## **Joint Venture**

A joint venture describes the relationship between multiple parties (two or more individuals, companies or registered bodies) who come to an agreement to achieve specific strategic goals. The parties to the agreement remain separate entities who come to the contract to magnify their individual gain rather than mutual gain. Though the parties to the contract have a specific business goal, their contributions to the contract are usually different in terms of cash or in-kind, its degrees or timing (Clayton Utz, 2014).

A recent agribusiness survey (Allen, 2014) reported that 41% of Australian investors and 48% of foreign investors prefer the joint venture model to invest their capital in Australian agribusiness.

Main Strengths of the joint venture model:

- It aligns and combines the interests of Australian farms and agro focused investors (Allen, 2014);
- Farms contribute farming expertise and local industry knowledge (Allen, 2014);
- Investors contribute: patient capital, good governance frameworks, off-farm expertise, networking and marketing channels for the products (Allen, 2014);
- Removes the Australian farms' capital constraints but retains the families as owner;
- No direct regulation (DPI, Victoria);
- Very flexible in application (DPI, Vitoria);
- Co-venturers are taxed separately (DPI, Victoria); and
- Joint venturers are not responsible for the acts of co-venturers.

Disadvantages of joint ventures:

- Off-farm investors want joint decision making authority (Allen, 2014);
- Farms are required to comply with the investors' complex reporting and governance requirements (Allen, 2014);
- Investors always need to rely on and believe all the production information generated by farms (Allen, 2014);
- Expensive and complex to establish (DPI, Victoria); and

- Limited liability can only be achieved if the parties to the joint venture have limited liability (DPI, Victoria).

Joint ventures with a passive investor such as a high net worth individual or institutional investor that does not have a strategic business goal other than to achieve a good return on investment are similar to equity finance.

### ***Comparison of Equity Finance and Joint Venture Models***

An important difference between equity finance and joint venture structures is the agribusiness joint venture does not own the assets of the business. Title to the land remains with the farmer. The parties in a joint venture retain individual ownership of assets (land, buildings, machinery and livestock) but contribute the use of the assets to the joint venture through a lease or other arrangement. A company structure is often used to facilitate the joint venture. Key aspects of the relationship are generally formalised using a joint venture or shareholder agreement.

An investor forming a joint venture with a family farming enterprise may be either a passive or strategic investor and can include institutional investors as well as individuals or corporates. Passive investment via a joint venture is similar to equity finance in that it provides a structure for external equity to join with an existing farm business to facilitate expansion. Joint ventures are a more flexible structure than simple corporate structures and investment professionals have used this structure to develop innovative financing models that facilitate the introduction of external equity into family farms.

For example, equity partnerships are a form of joint venture that have been widely used in New Zealand. Equity partnerships are usually structured as a private company with shares issued to each member according to the amount of money each investor subscribes. The equity partnership owns the land, plant and any stock. The equity partnership model never really took off in Australia primarily due to lack of liquidity in the farm land leasing market. In New Zealand farm land does not attract capital gains tax when it is sold, meaning stakeholders of farm businesses involved in land ownership can buy-in and sell-out of equity partnerships relatively easily. This is not the case in Australia where the sale of business assets attracts capital gains tax (ANZ 2014).

Another innovative joint venture model has been pioneered in Australia more recently to allow the best and most profitable producers to farm more land. In this model, the investor buys large amounts of land close to an existing farm business, with the producer's and investor's land being pooled to form a large scale farming enterprise. An operating company is established, with the producer and investors holding shares in the operating company in proportion to the assets that they contribute to the joint venture. The producer manages the farm and is paid a base salary plus a percentage of profits earned by the new, bigger entity. Title to the land contributed remains with the joint venture partners. That is, the producer does not lose title to his land.

### ***Models that Pool Resources***

Strategic joint ventures differ from passive joint ventures in that they represent a pooling of assets more akin to a business partnership. Strategic joint ventures can be used to grow the scale of a business by pooling the assets of businesses with similar production, thus achieving economies of scale. They can also be used to develop vertical integration within the business such as adding processing or packing to farming operations, and/or to providing access new markets and distribution channels.

Other structures that can be used to facilitate expansion through pooling of resources include cooperatives and collaborative farming structures. As with strategic joint ventures, each family farm retains ownership of its own assets and business yet has the opportunity to benefit from economies of scale, access to markets and/or processing its product, and improved management and governance (KPMG 2015).

### ***Leasing or Share Farming***

Leasing and share farming additional land offer alternatives to buying land and provide opportunities for business expansion (GRDC 2014). Leasing land can provide a steady income to the landowner and offers greater scale and associated efficiencies of production to the lessee without incurring the additional debt needed to purchase the land. A risk of leasing land that a producer no longer wishes to farm is that it can become run down.

Share farming is a sharing of risks between the share farmer and land owner. Whoever has the greater share of costs takes the greater risk as well as a greater share of income. A formal share farming agreement should be used to protect the interests of each party and formalise agreements on the detail of responsibilities for management and costs.

The primary focus for the remainder of this report is on external equity including equity finance and passive joint ventures.

## **5.4 Barriers to Investment**

The main issues acting as barriers to investment include:

### ***Equity Aversion***

Equity aversion refers to the attitude of producers who view the process of external equity investment as surrendering their ownership or giving away the control of their business (Hutchinson, 1995; Howorth, 2001; Oakey, 2007). In Australia, external equity investment in agribusiness has not been common due to a conservative attitude related to the ownership retention of agribusiness farms by the family (MGI Australia, 2006); however, it has gained popularity more recently.

### ***Poor Investability***

'Investability' refers to attributes (in this case shortcomings) between the investor and the farm business for which the goodness of fit in an investment project is lacking (Feeney et al., 1999). Shortcomings of the farm business owners include poor management team, poor profit potential for the level of risk; undercapitalisation and insufficient recorded information.

### ***Presentational Failing***

This relates to the state of the investors' frustration due to missing information in business plans, particularly when it relates to any of the generic questions that investors ask of any investment proposal (Mason & Rogers, 1997; Mason & Harrison, 2002).

## ***Investment Readiness***

'Investor readiness' of producers includes a range of issues from the investor's perspective regarding the business' capacity to provide financial confidence in return for the required capital. The issues include: skills of the firms' management, firms' clarity in defining the investment business case, the business model, route to market, governance arrangements and presentation (Shepherd, 1999; Mason & Kwok, 2010). According to KPMG (2015), most Australian farm businesses are not 'investment ready' and face challenges in attracting external equity due to a lack of financial or management skills to operate under more professional management structures required by external equity investors.

## ***Gaps between Investors and Farm Businesses***

Previous research has identified three categories of differences between producers and investors. In order for investors and farm enterprises to successfully operate they must have a clear understanding of each other's needs and minimise these gaps.

### ***Finance Gap***

This refers to the mismatch of investment that the suppliers of capital offer and what the farm enterprise is looking for. This gap may arise as investors generally want to invest a large amount of capital, whereas the farm enterprises want a relatively small amount (Mason and Harrison, 1995). Further, some investors such as private equity funds want to invest for shorter periods, typically 5 to 7 years, whereas the farm enterprises take a longer term perspective. Investors are sometimes active in small and medium sized businesses, but less frequently in agriculture at present. The most common reason for investors not investing in farm enterprises is the unprofessional family style of ownership and management (Wu Chua and Chorstman, 2007), and the tendency to use external equity as a last resort (Poutzioris, 2001).

### ***Knowledge Gap***

A knowledge gap happens due to the lack of proper understanding by the producers about investor financing tools, investment criteria and the finance industry generally (Graves 2010). Some notable Australian research in equity investment (Lindhe, 2007; KPMG, 2006; and Emerson, 2006) found that poor presentation of knowledge about the business to investors is a common problem that creates barriers to equity investment.

### ***Trust (Empathy) Gap***

This gap captures differences in goals, motivations and understanding between producers and investors. It originates from the negative attitude towards institutional finance by family business owners (Gallo & Villaseca, 1996, Upton & Petty, 2000) and the dispersion between sources of capital and personal, business or family goals (Gasson, 1999). The empathy gap arises from a poor level of trust between producers and investors (Poutziouris, 2001). The producers tend to have a poor level of experience with equity investment and thus do not feel at ease approaching investors. On the other hand, the investors also have a poor understanding about the family farm business, its goals and functional needs. The different motivations between investors and farm enterprises also create some barriers to mutual understanding. Some researches (Boyer & Roth, 1978; Poutziouris, 2001) have found that farm enterprises focus on control, lifestyle objectives and job security; while investors' primary goal is in generating a return on investment that is commensurate with the risk (Graves 2010).



## 6. Insights from Interviews

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This section summarises the results of interviews with investment professionals and producers that have had positive and negative experiences in equity capital raising. The interview responses within each group, while quite varied, highlighted several consistent messages.

### 6.1 Comparison of Grower and Investor Perspectives

Investment professionals work as intermediaries matching investors with farming enterprises. They need to have a strong understanding of both groups to perform their role. Perceptions derived from interviews with investment professionals have been used to gain an understanding of the current Australian external equity investment context as well as the needs of both investors and producers. The interviews provided insights into the finance, knowledge and trust gaps between Australian producers and potential investors for their businesses.

Our interviews with the investment sector have clearly identified a knowledge gap by the farming community in regards to the aims of investors. The feeling is that a number of myths and suppositions have created concern about the motives of investors, particularly foreign investors.

Investment professionals have also indicated that a lot of investors simply do not understand agriculture despite wanting to invest in the sector. They have to educate their investor clients in terms of commodity markets and all the surrounding risks associated with farming. This disparity in understanding between the two sectors has the potential for significant miscommunication, which could result in failure of any joint enterprise. It is important that both parties have a clear understanding of each other's goals and values before any investment takes place.

We have grouped the responses into themes.

#### ***Business Goals***

Our first observation from interviews with investment professionals is that producers and investors often have different business goals. In the view of

investment professionals, the majority of producers are usually about owning and handing over the farm to the next generation. They have relied on the capital gain value of the land to realise wealth growth. In terms of financial goals investment professionals suggest that many Australian producers are traditionally more tax driven than profit driven, in that they will usually increase debt to increase their interest and thereby offset their tax payments. Essentially farms don't operate the same way as many other businesses and this can lead to a degree of misunderstanding with investors.

*"Agriculture doesn't really have any reliable benchmarking. I mean there are sectors within it and the sort of information within it that provides benchmarking but it's not in the public domain and the industries do not collect good information on themselves. So this is a whole other issue that underpins the problems that we have attracting capital"*

Investors by contrast have clear business goals, they are looking for a profitable return on their investment. They can be quite patient about this and may be willing to look over a 10-year time frame to gain a return. Investors are often seeking to diversify their portfolio by adding some Australian agricultural investments to their investments in other sectors and/or countries. Like the grower they are looking for a return on capital that is commensurate with the risk, and unlike banks that producers traditionally use, equity investors will have a stake in the profit and can also accept a loss on the venture. Essentially they will have "skin in the game". One investor indicated what they were looking for as follows;

*"It is basically focussing on targeted assets instead of just a deal ....  
Focussing on geographically right assets with the right people .."*

It is important to be clear that they simply want to invest in good businesses, because they believe it will give them a better return on their capital. Investors want to see the type of return you would expect from any sound business investment. They might look at investing in agriculture as part of a diversified

investment portfolio. Like producers they are after increasing their land values possibly around 5-7% and receiving a 4-5% cash return. Private investors are sometimes prepared to accept a lower level of return than institutional investors.

Other investors may have different business goals such as securing a supply line to their profitable overseas business operations. These investors may be prepared to accept a lower return on investment since it satisfies a strategic objective.

As the goals between investors and producers can vary in their priority, there is a requirement for clear communication as to the agreed common goals of any venture; and investment professionals see themselves as playing a key role in not only bringing the parties together, but helping the parties to understand each other's needs. All investment professionals are agreed that having a clear understanding of the goals of the partnership is absolutely crucial to the long term success of the venture.

### ***Governance and Reporting***

According to investment professionals another point of contention that has been identified from this research is the importance that investors attach to governance and reporting. The investors are rarely on site so they are very reliant on the reporting process as a means of keeping up to date with how their investment is tracking. For reporting to be of value it is necessary that there is a good governance structure that will ensure transparency. For investors financial transparency is very important, both prior to investment and during the investment phase. Investment managers are often investing money on behalf of others and they are required to operate with due diligence on behalf of their client.

Although producers will clearly understand their financial operations; according to investment professionals they often lack the knowledge of good financial reporting. There are usually insufficient details on operational expenditure and poor record history. Their chart of accounts can often be mixed with other business ventures or family expenditure, so the value of the business may not be that clear to the investor. Investment professionals regard this as one of their more important gaps when trying to broker a business partnership.

Investors want to be sure that the grower is working in the best interests of the business and is a high performing farm manager. A preferred strategy for some investors is to identify the best performing farm businesses and invest in those operators with a view to increasing scale.

## ***Scalability***

The scale of the investment is also a very important consideration for investors. As a general rule, investors rarely see small investment as worth the effort required to undertake due diligence and set up the deal.

However, what is seen as a small investment differs between private, institutional and strategic investors. Private investors tend to invest \$3-20 million, while smaller institutional investors have a minimum investment range of \$25-50 million. Large institutions generally want to invest a minimum of \$100-\$150 million and this may be for a single property or an aggregation across several properties.

As one investment advisor put it:

*"A lot of people are not going to invest in a business worth \$5 million. That is a sad reality".*

Investments by corporate or strategic investors vary widely in scale depending upon the particular situation. For example, it could involve a multinational securing its supply chain or a local processor operating at small scale.

For producers wishing to find an investor they need to make a case for the potential scalability of their property. Agriculture is generally a low margin business and scale of operation is seen by investors as offering economies of scale and higher returns. For investors to get involved there has to be a lot preparatory work in terms governance and checking to make sure the investors' money is properly secured. This type of preparation requires a high level of expertise and is expensive to put in place. Consequently, from the investor perspective all that effort can only be justified for a sizeable existing investment. Their perspective in regards to agribusiness is about a strategy of scaling up that could further develop the business, take it to a more profitable level.

The traditional way that agricultural investment is perceived is that it is a low margin, high risk business. Therefore, what is presented to investors should either be considering reducing business risk or increasing the profit potential. An exception might be specific high net-worth individuals who are looking at developing a mix portfolio of investment to reduce their risk. So they might invest in a range of smaller properties or production types. The other scenario is where an investment fund is looking to buy the same type of production units across a range of soils and climate as a risk strategy. Usually the aggregation process is done by an independent investment professional who will charge for their services so they will have specific expectations about what the investment will need to look like.

Another exception relates to a new 'greenfield' venture that has a high profit potential and can be readily scaled up to suits a new market. In this case the investor would be relying on low scale investment to begin with but the opportunity to increase scale based on a high potential profit scenario.

### ***Horticulture as a Sector***

Australian horticulture is very diverse and investment in Australian horticulture has its major drawbacks in the scale of production it can offer, the products perishability and the high cost of labour. Its advantage is that it has a small footprint requirement which can be mechanised to some extent and in the right market can deliver better profits, given Australia's high reputation for quality and safety. One particular concern for some investors is that horticulture investment has a long history of failed ventures dating back to the 1980s. There were a number of horticultural projects over time that failed due to lack of markets. These include large scale melon projects, avocados, broccoli and olives. It can take time to scale up horticulture and given the volatility of the market and low barrier to entry, it often means that the market place can quickly become saturated. As a consequence of the risk and poor history some investors will be looking carefully at the business plan and projected assumptions when considering investing in horticulture.

It is worth noting that emerging publicly listed horticultural companies (e.g. Costa Group & Select Harvest) have posted a profit for 2016 and are looking at

expanding their operations. If it can be sustained over time, this would be an encouraging outcome that might entice investors into horticulture.

Strongly tied to horticultural investment is access to market. Due to the requirement for a complex cold chain delivery system, moving horticultural products to market is expensive. The limited shelf life of horticultural products requires the need for a well-established market connection. There are certain types of investors who have the distribution network and are looking for vertical integration by securing a direct supply line for their established horticultural market. The advantage of these types of investors is that they have an existing knowledge of consumer demand and can forecast required volumes of product required. Having their own farms or farm joint venture guarantees the retailer direct product access instead of having to compete in the open market for horticultural goods. It should be noted that most investors are not producers and would want their farms managed by skilled farm managers. For example, an interviewee indicated that a number of the investors buying up macadamia farms are foreign buyers who are not onsite and rely on his operation to act as on-farm management.

### ***Which Crops do Investors Prefer?***

The overall view of investment professionals interviewed was that it is more important to have a profitable business with top quality on-farm management and marketing than to focus on particular agricultural sectors or types of horticultural produce. Any annual crop areas with good soil and access to water are sought after by investors.

However, ability to mitigate risks associated with the crops is a consideration for investors. For example, table grapes are seen as volatile because they are dependent on markets and weather, while almonds are perceived to be easier to grow and highly mechanised with a medium term outlook.

Investment in horticulture to date has tended to be in perennials (almonds, citrus, avocados, berries) since they have a stronger investment picture rather than annual crops which are subject to markets and rapid changes in supply.

Strategic investors are driven by their investment objectives, for example seeking to export a supply of particular horticulture products back to their home market.

### ***Roles and Cultural Fit***

Investors are looking for return on investment or strategic ventures to complement an existing business. They are generally inexperienced with farming operations. They require the specialist skills of producers to grow and supply the product to a quality standard. They want to support the investment with whatever resources is required to ensure success. The producer can be either an employee or a partner depending on the strategy of the investor and the mutual agreement reached between them.

Currently the most common scenario in Australia is an outright purchase of a folio of properties operated by employed farm managers. This has resulted primarily from the problems of finding producers willing to share the equity in the land. Consideration is being increasingly given to equity finance or a joint venture where the investor is looking to partner with professional farm operations. This match between producers and investors has been slow as investors are looking for a strong professional business presentation with the types of governance that meet their internal requirements. Mostly investment professionals who are brokering the arrangements find that reporting procedures and transparency lacking from farm enterprises. They want to see farm books that can clearly demonstrate the long term viability of the enterprise. As one broker put it to us there is a disparity in business goals between producers and investors:

*"This is the biggest issue we found in relation to Australian agriculture. Their reporting is focused either to minimize tax or to meeting the bank governance. But neither of those is attractive to investors."*

The brokers have identified what they believe to be a lack of knowledge of financial reporting by producers and in their view producers see the 'financial advisor' or 'banks' as necessary evils not necessarily as someone who can help them to grow the business or actually increase their scalability.

*"... to be attractive to them (investors), you need to have proper reporting. And the reporting needs to be focused on profitability and the business must be focused on profitability."*

Investment professionals have also suggested that although producers are very good at planning over the short term for example what is going to happen in the next 6 months. They suggest that they need to be able to predict what is going to happen over the next 10 years and it needs to be a thorough analysis. This is because investors are looking to invest \$100 million or more in an enterprise (or aggregate of enterprises), so to be comfortable to do that, they need to check the existing financials have been done properly, proving that the business can actually deliver profit or an Internal Rate of Return that will deliver on target over 10 years. What investment professionals are suggesting is that producers need to put more consideration into being investment ready if they want to be involved in this opportunity. Differences between investor and grower perspectives are summarised below (Table 3).

*Table 3: Differences between Investor and Grower Perspectives*

<b>Themes</b>	<b>Investor Perspective</b>	<b>Grower Perspective</b>	<b>Gaps</b>
Business Goals	Required, based around profitability	Informal based around family discussion	Needs to be developed and documented
Governance and reporting	Required, must be transparent and regular	Informal only as required by lender	Need for professional assistance to meet required standard
Scale of operation	Needs to be large to justify cost of external due diligence	Constrained	May need aggregation, collaboration with others or demonstrate profit value
Horticulture sector consideration	Focus on market and profitability (good business model)	Set production paradigm (what's known)	Ability to be more market focussed
Roles and Cultural fit	Business minded, sometimes blind to farm based issues	Focussed on the money and the farm. Farm Issues may seem self-evident	Lack of knowledge around evaluating business fit
Being investment ready	Essential	Uncertainty due to lack of knowledge	Steps needed to prepare



## 6.2 Producer Experiences with External Equity

We interviewed 5 farm businesses that have pursued equity co-investment for capital raising. The interviews revealed certain similarities in terms of their experiences on this journey. We have explored the lessons that they have learnt along the way and summarised them as part of this report. Given the low number of participants in this space to date in Australia, and some reluctance to be interviewed for the research, we have drawn from experience of the agricultural industry in general rather than simply focussing on the horticultural sector.

### ***Why they Considered External Equity Investment***

The major reason given by our interviewees was that their expansion plans were being constrained by limited debt to equity ratio. In other words, banks were not prepared to lend beyond a certain amount so the proponents saw opportunities that were limited by a lack of available capital.

*"... maybe we could have borrowed incrementally more debt capital here and there, but ultimately could not have borrowed the sorts of volumes of capital we wanted to actually build a business that would actually benefit from introducing more capital"*

Outside of the limitation of debt finance, another reason given by interviewees was the idea of looking for investors who were interested in a strategic partnership that could add value to both businesses. The new partner would either have certain skills or capacity that aligned with the farm's business. This could be in end processing, market access or strategic supplies that would in some way complement the strategic fit of both businesses to increase scalability. It was suggested as important that the 'strategic' fit also had a 'cultural' fit in that the investor had some understanding of the potential and limitations of agriculture.

The underlying motivation was their perceived need for a long term growth strategy. The proponents saw a business opportunity and needed some way to capitalise on this opportunity. However, debt finance was considered inadequate to the needs of a good business opportunity.

## ***The Need for a Business Mindset***

The key message from those who are well into this journey is the absolute need for a different mindset. They had to change their paradigm from 'farming mode' to 'business mode'; they had to understand the corporate perspective. They suggested that 50% of their grower colleagues were more into farming as a lifestyle choice, in that they were satisfied to produce goods and deliver it to the farm gate for a profit. For those looking for investment it was about the bigger picture of where their farm sat in the food and fibre supply chain and where were the opportunities for growth into the future. They admit that in the past they had been mostly focussed on the engineering of farming but had only a rudimentary knowledge of business finance and how it applied to their farm. They realised that this mentality would have to change.

*"There is no way someone is going to raise capital of significant value unless they have good financial control, absolute 101."*

This was something that the investment professionals had also indicated from our interviews that in their assessment of farm books for investment by their clients; that it was very hard to determine the actual profitability of the farm business. The key message from producers that have gone down this path of seeking investment is that number one, they recommend to their colleagues to get serious about the way they intend to present their financials. They suggested that producers needed to change their mindset and get on board with financial reporting.

## ***Financial Reporting***

Fundamental to raising external capital is a need to clearly understand and be able to communicate the financials of the farm. Interviewees have all indicated that it was very important to have the farm's financials separated from any other business interest or potential conflicting family use. They want to understand the underlying profitability of the business over time and some idea of the profit outlook.

The farm must also be able to explain the reason behind the expenditures. This is to allow the investor to learn more about the nuances of the business and the issues they might need to consider as a partner in the business. If this is all

presented up front, it saves a lot of problems later trying to explain and justify operating expenditure in the future. The investor would have a good understanding of how the business operates and why some of the expenses were required before investing.

Most of our interviewees have used professional accounting firms to prepare their financials to present to investors. This is not about minimising your tax position but about demonstrating the profitability of the business. In this way it is done in a format to suit International Financial Reporting Standards which is understood by global investors.

Producers should also remember that this is not a one off preparation. Partnering with an investor that is not onsite means a lot of regular reporting so they are aware of what is going on.

*"During harvest we do weekly harvest reports to just keep up to date those investors on harvest progression – that's a financial report on yields and price and we meet with our investors twice a year either on the farm or we travel to Sydney or Melbourne to have meetings."*

A lot of investors do not have a sufficient knowledge about agricultural markets and long term risk to be able to predict the long term average return. They will rely on the grower or an investment professional to supply that information. They are aware that investment professionals and producers would have a different knowledge base, so they would prefer receiving the insight from both parties. Interviewees indicated that it was important for producers who had the best knowledge base on their asset to critically look at their long term return and expenses and set that out in a 10 year forecast. This was their way of staying in technical control of the business.

The indication from the interviewees was also that reporting in a formal way was more involved than what they were required to do previously. They did suggest it was a very useful exercise in learning to manage their business once they got used to it.

*"... reporting that would report on yields and costs and things like that, there'd be monthly financial reporting, management reporting, with full, full financials for that month against budget and then there'd be half year and yearly full reviews."*

### ***Being Methodical about the Farm Data***

Our interviews suggested that farms looking for an investor can expect to be asked for a lot of information from people who may not be very familiar with farming. Therefore, the information on how the business operates will need to be very clear. A lot of the farm data that producers may store in their heads may need to be recorded somewhere for access by the partners. Investment professionals have also suggested that investors are looking for as far as possible full transparency so they can do a full financial, commercial, legal due diligence. They're looking to run a professional process, so they want a data room that's got all the historical information, all the details on the farms and they want to engage outside professionals to undertake the financial and legal due diligence required as part of their corporate practice.

The issue is that producers are quite often not ready for what needs to be in place to meet the investor's due diligence process. So the interviewees recommend that producers get advice about how they need to be prepared for what they're going to go through.

*"if they can be somewhat prepared, have a data room prepared before they do the marketing they're on the front foot, because the process will move much more quickly."*

The consensus is that for producers, getting investment ready means that lots of things need to change, everything from mindset and attitude, to understanding the structure and strategy of the project, through to just basic document preparation, communication processes and process administration. The whole thing is very much based on transparent historical farm data being made readily available.

Those with experience in this space have quickly come to understand that they had a lot of inherent knowledge about the farm that was not recorded anywhere. This is knowledge they had accumulated over many years working on the property and the industry. They had come to accept that investors would have a lot of questions about why decisions were made. They suggested this should not be taken as a criticism but more a genuine interest to understand the operation of their investment. This will vary depending on the investor. Institutional

investors who have a broad agricultural portfolio will require less information than a new entrant private investor. Their advice was best to expect a lot of questions. One advantage is that technology could supply a lot of the data gathering, then it was up to the producers to outline their interpretation of that information.

### **Cultural Fit**

Our interviewees have also warned that it is not simply a matter of accepting the first offer. Before accepting an investor, it is just as important for the farm to do its own due diligence in assessing whether this is the right investment partner for you. They point out that a lot of investors may want to invest in agriculture but they may not know anything about agriculture and the needs of the farm business. This can spell problems down the track when the business hits seasonal issues like drought or poor commodity markets. For example, the respondent stated that there were some investors who are spending money to make a deal without any specific plan. But these deals are not a suitable use of capital for the Australian agribusiness industry as these investors are not culturally aligned and adaptable to the reality of local issues. Their timeframe and expectation were just not aligned with what agriculture could deliver. Cultural fit was regarded as critical to maintain a good ongoing working relationship.

*"so we looked for trust, fit, able to work together, we have the same outlook for the business, same investment horizon, the same manner in which the parties expect to want to run the business looking forward."*

As a follow on to Request for Information (RFIs) is the need to be candidly open with their equity partners about the issues, or potential issues, of the business. Agricultural investment is usually for the long term and long term relationships require trust.

Financial disclosure is not the only requirement. An important underlying issue is that of family dynamics where a number of family members might remain in the business. Investors are more comfortable in an atmosphere where rational

decisions based on professional respect operates at management level. Family dynamics is something they quickly become aware of at management meetings.

### ***Managing Control of the Business***

Producers who have taken up third party investors all indicated that they had to have a good hard look at how this was going to operate.

*".. the biggest issue or concern that the family has is the dilution of a lot of returns and a potential loss of control, and also the complexity that's associated with dealing with a third party who may or may not agree with us on various issues moving forward. .... but, well we think that the benefits outweigh that."*

All the producers we interviewed have had to deal with the issue of control of the business and each has created different strategies to deal with this. Initially they had to consider what the money was going to do for them. They didn't want money to just buy equipment and find themselves becoming a minority shareholder in the process. They had to think carefully at how much money they needed to make their expansion plans work. In other words how much percentage ownership does the money represent?

Some were willing to allow greater than 50% share provided they had safeguards in the terms of the shareholder agreements, which spells out what decisions can be made and how they should be made. The use of these formal agreements is very important to set the boundaries for operating. If it's a partnership then there is a 'partnership agreement' that spells out the rules around management like it might say for example, that expenditure over \$5k will need agreement with the partner. One interviewee was clear that his investor partner was not involving himself in day to day management. It was important to him that he had operational control on the farm.

*".. he's not telling me what we should do on a day to day basis, he certainly doesn't want to know, he's got a lot of other work and he doesn't have the time or the inclination to micro manage it. He gets paid a lot to do other things so I think he's smart enough to realise he*

*shouldn't be running around here telling everyone whether they should be doing this or that.."*

This is an important consideration; essentially the producer was saying that he was getting paid for his skills and machinery, and the investor needed to let them get on with doing what they do best.

In the end control of the business came down to accepting that the capital investor wanted some say in the business depending upon the level of investment. It was also important for the producer to demonstrate his capacity to get on with the job and deliver to everybody's best interest. It was usually necessary to have these arrangements negotiated in a formal shareholder agreement.

### ***Failures and Lessons Learnt***

Some insights from those that have made early attempts at securing investment and failed have shared what they believed those failures resulted from.

Markets tends to drive demand, one interviewee indicated that 3 years ago he travelled all over Asia with an investment banker looking for investors with some interest but no success primarily for the following reasons:

- Size of their request being too small (\$15million), investors were looking to invest hundreds of millions
- Risk uncertainty by investors (agriculture not well understood)
- Limited presentation (our inability to demonstrate all the data)

It was also a case of the market not being ready. So in the interviewee's mind producers needed to understand what the market was looking for, and this has changed over recent years.

Another failure story was producers spending a lot of time and expense going to the market without a clear agenda about what they were offering. Going with *"we can do whatever you want"* was a not a great strategy and would confuse the investor. It was important to thoroughly understand the needs of the market and have a clear strategy about what you are offering.

## 7. Investment Roadmap: Development of Horticulture in the QMDB

### 7.1 The Horticulture Opportunity

This section of the report examines how the development of high value horticulture in Queensland's Murray Darling Basin region might be progressed through investment of capital from outside the region. Australian horticulture represents a high value industry with significant potential for export earnings. Our horticulture products are perceived as safe and of high quality providing a counter-seasonal advantage for northern hemisphere export markets.

In addition to exports, there may also be opportunities to replace high value imports with local production or to value-add to horticultural produce.

Horticulture offers a particular advantage in having the opportunity to create price differential relative to similar commodity products. A disadvantage is often its perishability and more complex supply chain requirements. Australia's main horticultural exports include tree nuts, berries, citrus, pome fruits and stone fruits.

#### ***Horticulture in the Murray Darling Basin***

There are a range of high value horticulture crops that can potentially be grown in the MDB region at scale. The region has a dry sub-tropical climate, secure water supply and large areas of irrigated land. However suitable infrastructure for cold storage, packing and/or processing of horticulture produce is limited. Further, while the lack of a well-established and versatile transport infrastructure and distance from markets have impeded development in the past, the recent opening of an international freight capable airport in Toowoomba may provide new opportunities for the region to export high value horticulture products.

Interviews with a sample of MDB growers indicate some interest in diversification into high value horticulture. However most of them had a poor knowledge of the market demand for the products they were considering. Very few appeared to have done a systematic review of the long term market potential of the crops they were considering. Most were looking at diversifying into new crops as a



series of trials of new crops that have not previously been grown in the region. They were relying on the other farm commodities (e.g. grain & cotton profits) and/or MDB Regional Economic Diversification program funding to finance investment into horticultural experimentation.

Attracting investors with another commodity product is likely to be difficult simply because of the competitive risks. Farmers need to consider what are the crops that can be grown that have a point of difference in the market place that investors would be interested in. The development of new product lines or value adding to existing commodity is more likely to attract investors. Crops that have an added value to food such as what is referred to as functional foods which are plants that have health benefits as well as being a general food are a good example. They may be suited for attracting investors due to their estimated growth potential in the market.

There was also little evidence of collaboration amongst growers. Collaboration could, if embraced, provide opportunities to share storage and packing infrastructure, increase market access for regional products and develop value-adding facilities. The combination of early stage horticulture crop development, lack of collaboration, and the paucity of suitable infrastructure for horticultural production indicates that the region's high value horticultural production is in a very early stage of development and would require considerable effort and capital over a period of time.

### ***Need for Information on Capital Raising***

There is an opportunity for some of the existing growers to participate in the development of high value horticulture in the region. We have identified from the producers we interviewed in the region that there is a lack of knowledge on capital raising apart from traditional debt finance. Older producers were generally more interested in retaining the 'status quo' operating within bank loan requirements and possibly exiting in the future using the sale value as a retirement fund. Younger producers were more open to alternatives in regards to capital raising knowing that banks were less likely to give them the required capital to farm commercially into the future. Overall there was an interest from

those interviewed in better understanding the capital raising opportunities for agriculture.

## **7.2 Who will Drive Development?**

QMDB growers wishing to participate in the development of high value horticulture might consider coming to an arrangement with investors from outside the region. Other growers will choose to sell their land and water assets to investors that see an opportunity to make a profit from developing horticultural production and infrastructure.

Investment is needed to develop and increase the scale of high value horticulture production and related infrastructure such as storage, packing and processing facilities. While some of this may be undertaken by the region's existing producers, it is expected that investors from outside the region will drive the majority of this development. These investors are likely to include large or corporate horticultural producers investing in the region as a strategic move to increase and/or diversify their production and packing operations.

Other investors are unlikely to have expertise in horticulture production and will need to recruit farm managers with the necessary experience and expertise to manage large scale production. These investors tend to use investment professionals to form aggregations of farms that can be consolidated to give sufficient scalability to be worth the investment cost. At present the main targets have been commodity producers that have been relatively easy to aggregate and have simplified marketing structure (e.g. grains or beef). In many instances the land has been purchased and aggregated; with operations (e.g. machinery) consolidated and operated by professional farm managers. In some cases, producers selling their properties to these investors have secured employment as farm managers.

## 7.3 Options for QMDB Producers

The options available to growers are summarised below. Detailed information about the different options is provided in previous sections.

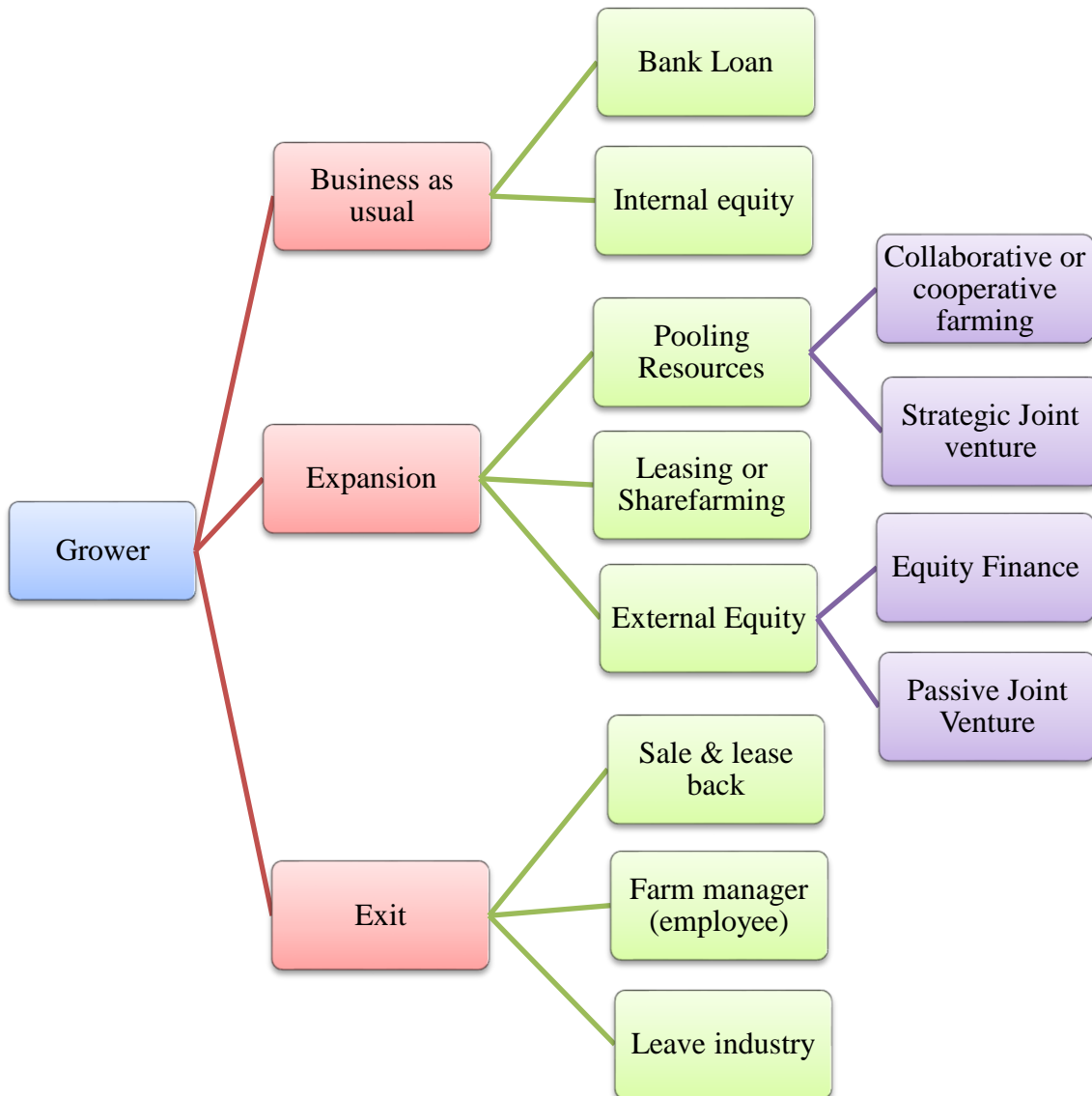


Figure 2: Grower options

It is expected that the majority of existing MDB growers will continue to rely on bank finance to operate their business until they either hand over the farm to the next generation or exit agriculture altogether.

Coming to an agreement with investors from outside the region might be an option for producers wishing to pursue an expansion trajectory. Most businesses

reach a stage in their development when the combination of internal (family) equity and available debt from banks and other sources is insufficient to finance potential opportunities for growth in the business. External investment is therefore required.

Different types of investors, their motivations and scale of investment vary considerably and are summarised in section 5.1. There is an emerging class of investor that is looking more closely at investment arrangements with family farms as an option to outright acquisition. Equity finance and passive joint ventures are types of arrangements between the existing owners and investors where control and ownership of the farming enterprise is shared between the parties.

These options would require the family to consider becoming shareholders in the enterprise rather than being sole owners. The continued involvement of the family can be viewed by the investor as reducing their risk in the knowledge that the grower has the local experience and required skill to manage production.

Some investors, particularly strategic or supply line investors may present opportunities to form a strategic joint venture. Under these arrangements the grower and one or more parties agree to pool their resources for the purpose of accomplishing a specific business activity. Taking on investors will undoubtedly be more complex to manage, but it also offers the opportunity to significantly expand the scale of the business.

### ***Options if you Don't Fit what Investors are Looking for***

Many farming enterprises will be considered 'uninvestable' since they do not meet the requirements of investors outlined above, nor do they have the potential to meet these requirements due to being too small. There are some options for producers not meeting these requirements but who want to participate in horticultural development and access increased profits from high value horticulture markets. For example, producers could consider collaborative farming models such as a strategic joint venture or forming a marketing or value-adding co-operative. Another potential option for small producers might be to create a value added component to their enterprise that can demonstrate future profitability.

## 7.4 Key Indicators in the Decision Making Process

There are several indicators that growers should consider when deciding whether external equity is right for their agribusiness:

- Are you considering investment for the right reasons?
- Are you investable, and if so for which types of investors?
- What does your family want to achieve and how you want to do it?

### ***Are you Considering Investment for the Right Reasons?***

An injection of external capital can facilitate significant expansion beyond what could be achieved through family funds (internal equity) and bank loans. It is not a suitable option if your goal is to reduce debt, payout family members, achieve an above market sale price for a property, or pursue an incremental growth or diversification strategy. While debt reduction and/or succession planning may be considered as an additional aspect to the primary goal of enabling significant expansion of the business, they should not be the sole reason for considering an injection of external capital. Be wary of advisors or experts that suggest that they can find you an equity partner to solve problems such as poor profitability, high debt, or to 'realise the true value' of an undervalued property.

### ***Are you Investable?***

Investors vary widely when it comes to what they are looking for in terms of scale, profitability and other attributes of the agribusiness and farming family. A common theme is that they are looking for a business venture that has potential to grow and return a profit. Some have a clear strategy and a well-established understanding of agricultural production and markets, while others have very little knowledge of agriculture and are simply looking for diversity in their investment portfolio. Another typical example is strategic investment where an investor is looking to secure a production to market supply chain.

Investors look for:

- Large, profitable farming enterprises
- Skilled and experienced farm management
- Access to a secure water supply
- Business and financial proficiency of the owners
- A comprehensive business plan outlining future growth strategies
- A good fit with their needs and motivations – the right partner

### **Scale**

While larger investors are not interested in \$5 to \$10 million scale of investment, family offices or individuals would be. It is generally difficult to find investors if seeking less than \$5 million, unless you are able to find an individual or business with a particular interest (possibly strategic) in what you are proposing.

Strategic collaborations or joint ventures may be the best option for expansion if you don't have sufficient scale to attract a passive investor such as an institutional or family office investor. Strategic investors interested in expanding supply may see an opportunity to invest in growers that have experience and expertise in growing a particular high value crop. For example, the investor may wish to increase sales, enter new export or domestic markets or commence value-adding through processing and packaging. This type of relationship can sometimes be developed through a simple marketing or supply agreement before progressing to the next step of expanding production through an external equity investment arrangement.

### **Stage in business lifecycle**

New ventures such as diversification into crops that are unusual or have not previously been grown in the region are more risky than established ventures where the grower has significant experience and expertise. This higher risk is likely to deter passive investors but may be attractive to a strategic investor who is prepared to share the risk and potential returns.

## ***Profitability***

Return expectations vary across investors and are related to the investor's risk appetite and return profile as well as the underlying riskiness of the agricultural assets being considered. There is no single figure that can capture the return that investors require. The investment advisors we spoke to indicated a potential range of anywhere between 6% and 12% comprising returns based on operating profitability (2-5%) plus capital returns from land value appreciation (4-7%). Strategic investors seeking to secure an increase in supply of product may be prepared to accept lower returns.

Profitability relates to just the operations of the business and this is different to how family farming enterprises tend to do their accounting, which is mostly tax based. Personal and family expenses should not be included when calculating profitability since only business (non-lifestyle) expenses are relevant to investors. In addition, capital expenses such as water development and infrastructure costs should also be stripped out to calculate profitability. These expenditures are a way of re-sinking profits into the business, but they should not be deducted when working out profitability.

Investors also have diverse expectations about business professionalism, reporting and governance.

## ***What does your Family want to Achieve and how do you want to do it?***

If you are considering investment to achieve a significant expansion of the business and are investable to one or more types of investors that align with your goals and prepared to spend significant amount of money and time to raise capital – you are ready to commence a journey of becoming investment ready and working out the details of what the family wants.

The family needs to work out what it wants and how it wants to do it, but it should also be prepared to change the way it does things. This might include expansion plans, the type of investor sought and what the family is looking for in terms of fit, views on maintaining control and business structure.

Consider succession planning and debt reduction as part of planning if needed. Also consider how much are you prepared to spend on both direct costs such as business restructuring, due diligence, accounting and legal fees as well as indirect costs such as time spent on raising capital and responding to detailed information requests. Consider having a dedicated person in the business focussed on raising capital.

Farming families that have taken this journey say they learned from the process. They encountered hurdles along the way, and reconsidered different aspects as they progressed. They also stressed the importance of finding the right advisor for their needs.

## **7.5 Being Investment Ready**

The process of being 'investment ready' is a long road and likely to be many years in development. It will require some rethinking of the way the business is operated and presented and requires some professional advice. There are a number of important things that growers can do to prepare for seeking external equity investors.

The message from grower's experience in this area is for their colleagues to take their time, establish clear business goals, put their financial and operational systems in place and look for the right partner fit. The key elements suggested by our research include the following.

### ***Develop a Business Mindset***

Thinking about the farming enterprise as a business first and foremost is an important first step. This means focusing on financial management to achieve profitability and developing a growth strategy for the future of the business. This can be difficult for some family businesses, especially if there are strong emotions or family dynamics that impact the ability of the generation wishing to grow the business and take it to a more corporatized structure.

Investment professionals suggested that producers also need to cultivate a different mindset when it comes to working with outside partners. In the past



they would have made their own management decisions without having to justify the reason for it. Now they must consider taking outside advice and must also put more effort into reporting what they are doing. Sometimes major decisions will need approval of the partners in the venture. They will need to have a team culture with their investment partners.

It will be important for the farm to demonstrate a high level of business and financial proficiency; this has been highlighted so many times by investors in our research as to be considered indispensable.

### ***Succession Planning***

It is critical that all parties to the enterprise are consulted in the future direction of the business. Given that preparing for investment is usually a fairly long term process the most common first step is to have a 'succession plan' for your enterprise. This quickly makes clear the interest and capacity of the family going forward and will demonstrate who is up for the venture and whether they are prepared to bring their share of the equity on board and how the current generation will retire from the business. The succession plan is the first necessary step in determining who will be involved and how much they are prepared to invest in the next phase of the business. Recent research by the Rural Industry Research and Development Corporation (RIRDC) has indicated that farms that have achieved a high level of business performance, also showed a higher level of commitment to having instituted a 'succession plan' (Slaughter et al. 2016).

### ***Audit of Assets***

Before approaching a potential investor, the enterprise needs to audit its resources in considerable detail. This will include such basic things as land area, land type, land use category, water licenses and location in relation to infrastructure such as road transport, buildings, plant and equipment and so forth as you would for a sale. Apart from the 'hard' assets, going into a business partnership it is also important to list the 'soft' assets such as the available people skill, the established goodwill and the connections to suppliers and markets that are important to the expansion of the enterprise. This is essentially a list of all of the things that are required to run the venture. This allows the

enterprise to put a value on its offering in the upcoming negotiations with investors, and it is the first thing they will ask in regards to the business.

One suggested approach is to start with a capital attraction feature, which could include management ability, water security or market opportunities. Farming enterprises considering external equity need to understand where they are at and what they have to offer an investor. Attracting an equity partner will involve marketing the business proposition to potential investors. Investors will be assessing potential risks and producers need to be aware of the risks involved in their business that the investor will want to know more about. Producers need to anticipate questions by disclosing information up front and being prepared to answer questions and explain the reasons behind the information that is presented.

One agricultural investment advisor put it this way:

*"Sit down with your accountant or other professional advisor with a big whiteboard in front of you and look at what you are good at, what you could be better at, and try and look at it through somebody else's eyes who probably doesn't know much other than the broad macro of agriculture."*

### ***Have a Business Plan***

A professional business venture requires a lot of careful preparation in order to demonstrate the viability of the business into the future. You have to show how the business is expected to grow over the next 10 years. Although predicting the future of expenses and income is difficult and uncertain, a forecasted budget is something that only the person intimately involved in the business can do. Essentially the growth over the last ten years will point a path for growth over the next 10 years. If the investment can double or triple your capacity, how would this affect your returns and profit? It is advisable to seek professional assistance in this area if you are unsure as to the means of doing this. You also have to be able to demonstrate a certain capacity to anticipate issues that are likely to impact on the business (e.g. drought), and what are your contingency plans for such events. Projected revenues will be important and should reflect that you have identified high value market opportunities and considered how you

will fit into the supply chain. As investors are not producers they will usually want an independent professional to assess the potential of the business and carry out a due diligence audit.

When presenting the case for the business it is also important to show the expected increase in property values over time. Investors are also looking for a hedge against inflation and improved land values is one of those investment areas. Property values will usually increase over time which is attractive to investors. This is a consideration if you are thinking of separating the farm land from the venture.

Although the level of co-investment from the grower to access an equity partner is not specifically defined, a high level of co-investment makes for a strong business case.

The project concept must show the potential for growth in terms of such things as having water security, suitable land resources, readily available transport infrastructure and accessible labour in an area that is not compromised by urban growth. This is not an exhaustive list but the project concept needs to demonstrate that there is not a constraint that will impede the future growth of the venture.

### ***Seek Professional Advice and Assistance***

This is an important step as investors will demand a great deal of information when evaluating alternative investments. In our assessment producers should approach an agribusiness investment professional who specialises in this area or one of the major accounting firms. The reason for doing so is that the possible options are highly varied and depend on which investors are in the market at the time and what they are looking for. It is difficult to provide a definitive list of investment professionals or provide a specific recommendation as the investment professionals may specialise in only one sector (e.g. macadamia) and may not be as familiar with other opportunities thereby limiting the grower's options. A list of investment advisors is included in Appendix 2. These are some of the advisors that participated in this research and have agreed to have their names included in the list.

An important step in becoming investment ready is preparing for the due diligence process. This will involve getting a lot of documents ready. Although much of the above processes are organised by the investment professionals, producers will need to have very accurate and detailed information about their farm business. This is how one investment professional indicated what the investor was looking for:

*"... they're looking for as far as possible full transparency. So they're doing a full financial, commercial, legal due diligence. So they're looking to run a professional process. So the setting up of the data room that's got all the historical information, all the details on the farms and they're engaging professionals to undertake the financial and legal due diligence."*

Institutional investors are often being entrusted with other people's money, so they must apply due diligence in terms of their investment choice. They will often contract an audited account of the farm's finances to evaluate their business performance. They will not be interested in simple tax minimisation strategies but will instead look for the underlying profitability. What is required is that the farming enterprise demonstrates the profitability of the business. Agribusiness investment professionals when reviewing the farm books know that without a business demonstrating profitability, the investor will not be interested. The books must also cover a history of the enterprise showing a viable level of profitability over time.

### ***Professionalise your Finances***

Your business finances must be detailed and transparent clearly showing how it has been performing over time. The finance reports must have clearly separated any personal expenses. Investors also have a responsibility for the money they invest so they are expected to carry out a due diligence process before investing in any business, this means you can expect your books to be closely scrutinised. You will undoubtedly lose some of your freedom to spend as you wish but as a benefit you will have gained a powerful partner who is interested in your success.

First you have to meet their expectation in terms of financial operations. It is acceptable that some years may not make a profit but over time the business

must demonstrate a profit after paying an acceptable salary to the operators. The preparation of accounts with full disclosure will usually require the assistance of a professional accountant before presenting the books to any potential investor. Investors will not consider investing without this step. Note that there is no specific percentage for what constitutes a "normal" profit margin. It would be fair to say that consistently good profit margins or a good average profit level over time would be of significant interest to investors. Typically in agriculture because of the variability of seasons, risk is considered from 5-10 years.

In addition to improving the standard of business reporting and presentation (normalising the accounts by stripping out lifestyle and capital expenditures), some tax planning and restructuring will be required since many agribusinesses are in trusts and this doesn't suit most investors.

Overall investors need to be closely informed about the progress of their investment and as such will require the following information to varying degree of details:

1. A strategic plan and operating budget over the medium to longer term (approximately a 10-year window)
2. A potential path for expansion (available market, land, water, labour and infrastructure)
3. A suitable business structure and control system
4. A regular reporting process that allows them to track performance over time
5. A system of financial governance that ensures that expenditures are genuinely required to drive the business
6. A demonstrated level of technical capacity on ground
7. A realistic risk management appraisal in terms of such things as climate, logistics and markets

### ***Find the Right Partner and Build Trust***

It is important that all the partners in the business are in agreement about what to expect from the business and how it is to be operated. Experience shows that investors like to closely follow how their investment is doing and are likely to ask a lot of questions especially at the start, so regular communications should

be anticipated. A partnership mindset is needed. Producers should do their own due diligence to satisfy themselves about the credentials and trustworthiness of the investor they are considering partnering with. Being able to work together is vital.

The advantage of an investor partner is that they have a strong vested interest in your success and can add not only capital but also market connection or other intangible benefits.

The disadvantages are that they may intrude in your space in a way that banks are unlikely to do unless they detect that you are financially risky. Banks do not have a vested interest in your success to the same extent; they simply need to ensure that you can cover the loan. Because the investors' money is at greater risk than the banks they are more diligent in assessing your viability and will demand regular communication over time as to the performance of the business.

Fit is the match between the needs and motivations of the investor and producer. Investors generally require the producer to have well developed production and farm management skills. Investors will not be doing the farming they will expect you to be doing that, but they do want to be sure that it is professionally done. They will want to know that there is a valid reason for any major expenditure and also what to expect from the business in terms of profit. Producers should also look for investors that best match their values and capacity for delivery. Having someone else part-own the business is not uncommon in the business world, what makes it work is finding the right partner.

## 8. Conclusions and Recommendations

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### **Key Messages**

1. The region's high value horticultural production is in a very early stage of development and will require considerable effort and capital over a period of time. Investment from outside the region will be needed to drive the majority of development.
2. QMDB growers wishing to participate in the development of high value horticulture could consider partnering with investors from outside the region through co-investment, joint venture or other collaborative ownership arrangements.
3. Potential investors and their motivations are diverse. They include institutional investors such as superannuation funds and private equity funds, private investors such as family offices and high net worth individuals, and corporate investors seeking access to supply of produce.
4. Professional investment brokers and advisors play the role of matching producers with suitable investors.
5. Producer options include:
  - a. Accelerated expansion - Entering into a partnership with an investor or a strategically aligned business
  - b. Exit - Selling the farm and possibly staying on as a manager or in a lease-back arrangement
  - c. Doing nothing - business as usual or steady growth/diversification
6. Some investors are interested in the first option (co-investing and becoming a business partner) as well as buying farms outright. Sometimes multiple farms are purchased by investors and aggregated into a large farming enterprise managed by an experienced and skilled farm manager.
7. Investors interested in co-investment look for:
  - a. Large, profitable farming enterprises
  - b. Skilled and experienced farm management
  - c. Access to a secure water supply
  - d. Business and financial proficiency of the owners
  - e. A comprehensive business plan outlining future growth strategies
  - f. A good fit with their needs and motivations – the right partner

8. Investment in horticulture to date has focused on in perennials where risks can be more easily mitigated compared to annual crops that are subject to weather, volatile markets and rapid changes in supply. Investment in other horticulture products is evolving and may be linked to export market opportunities.
9. The main reason to consider taking an equity partner is to enable a growth strategy. This could involve overcoming constraints associated with bank finance or partnering with a strategic investor to add value to both businesses.
10. Potential impacts of taking external equity investment include dilution of returns, potential loss of control and the complexity associated with dealing with a third party. In most cases operational control of the business remains with the producer while the investor is involved in strategic decisions, regardless of whether the investor owns more or less than 50% of the business.
11. There are substantial differences in the perspectives of producers and investors. Agricultural investment professionals have an important role to play in educating both parties about the other and bringing them together.
12. A cultural change is needed in producers and investors to work together.
13. There is a need to help farmers to build finance and business skills.
14. The process of becoming 'investment ready' is a long road and likely to be many years in development. It will require some rethinking of the way the business is operated and presented and generally benefits from some professional advice.
15. Producers wishing to introduce external equity capital into their farming enterprise need to have a clear business plan for the future and a strategy for how to achieve it. They need to understand what they want from an equity partner and what they will need to give in return.

### ***Recommendations for Further Work***

This research has uncovered several areas where further work is needed.

1. Producers would like to know which investors are in the market and what they want to invest in. On the other hand, investors need information on agricultural businesses that are seeking an external equity partner. While



specialist investment advisors are able to facilitate a degree of information sharing between investors and producers, there is scope to develop enhanced information sharing tools.

2. Further research is required into barriers to investment that could be used to underpin policy recommendations and market innovations. There are many barriers to investment, but limited solutions have been developed to date.
3. Scale remains a key barrier to investment requiring innovative solutions. While there has been some market innovation related to the use of passive joint ventures for investment in farming enterprises, there remains considerable scope to develop equity instruments that facilitate capital raising by cooperative and other collaborative agribusiness models.
4. Development of investment roadmaps for:
  - 4.1 Queensland's key agricultural regions, including the prime agricultural region encompassing the Lockyer Valley, Darling Downs and Granit Belt; and
  - 4.2 Queensland's key horticultural and other agricultural industries.In addition, an export strategy could be developed to augment each investment roadmap. Regional and industry export strategies could include identification of market opportunities; supply chain and distribution channels; storage, packing and processing infrastructure requirements; supply networks and quality assurance systems.
5. To promote the sustainable growth and development of regional centres, there is scope to further explore investment in value add and food processing innovation to improve post farm gate profitability for the horticultural industry and flow on investment into future development of functional food products.
6. A program of assistance to provide structure for producers considering investment; including decision support tools and capacity building related to preparing a detailed business plan and export strategy, and building finance and business skills.

## References

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- (Austrade), T. A. T. C. (2014). Investment opportunities in Australian agribusiness and food. Sydney NSW
- ABA (2014). Submission on Australian Agricultural Competitiveness Issue Paper.
- ABARES(2013). Australian Vegetables Growing Farms and Economic Survey, 2012-13
- Advisors, V. (2015). 2015 Global Food & Agriculture Investment Outlook: Institutional investors meet producers.
- AgriFood Skills Australia (2015). Contemporary business strategies and learning models in the agriFood industry.
- Allens (2014). A greater yield: Attracting investment into Australian agribusiness Allens Agribusiness Survey. Retrieved from Australia:  
<https://www.allens.com.au/pubs/pdf/indus/AllensAgribusinessSurvey.pdf>
- ANZ (2014). Feature article: equity partnerships – a look under the bonnet. *New Zealand economics: ANZ AGRI FOCUS*.
- ANZ (2015). HORTICULTURE GROWING/ PROCESSING INDUSTRY. Advisory notes September 2015 on the Australian Horticulture Industry
- Bennett, J. A., R. W. Sias and L. T. Starks (2003). "Greener pastures and the impact of dynamic institutional preferences." *Review of Financial Studies* **16**(4): 1203-1238.
- Boyer, P. and H. Roth (1978). "The cost of equity capital for small business." *American Journal of Small Business* **2**(1): 1-11.
- Bond University (2012). Submission to Family Business Australia, *Submission 3*; Moores Family Enterprise, *Submission 8*; Professor Mary Barrett, Dr Chris Graves and Dr Jill Thomas, *Submission 14*; Associate Professor Pi-Shen Seet, *Submission 35*.
- Cameron, B. (2016). Presentation at PMA conference Brisbane June 2016.
- Castrogiovanni, G. J. (1996). "Pre-startup planning and the survival of new small businesses: Theoretical linkages." *Journal of management* **22**(6): 801-822.
- Christy, R., E. Mabaya, N. Wilson, E. Mutambatsere and N. Mhlang (2009). "Enabling, environments for competitive agro-industries." *Agro-industries for development*: 136-185.
- Clayton Utz (2014). Doing Business in Australia: Business structures. Retrieved from <https://www.claytonutz.com/knowledge/2014/july/doing-business-in-australia-business-structures>
- Cooper, A. C., F. J. Gimeno-Gascon and C. Y. Woo (1994). "Initial human and financial capital as predictors of new venture performance." *Journal of business venturing* **9**(5): 371-395.

Douglas, E. J. and D. Shepherd (2002). "Exploring investor readiness: assessments by entrepreneurs and investors in Australia." Venture Capital: An international journal of entrepreneurial finance **4**(3): 219-236.

DPI. (2011). Business Structures in Agriculture. Horticulture Services Branch, Department of Primary Industries, Victoria; Queenscliff Victoria 3223 Retrieved from [dpi.pwe.tas.gov.au/Documents/WfW\\_Market-Opportunities\\_Business Structures.pdf](http://dpi.pwe.tas.gov.au/Documents/WfW_Market-Opportunities_Business Structures.pdf).

Dwyer, T. and R. Lim (2001). Efficient Equity and Credit Financing for the Rural Sector: New directions in rural and agribusiness finance, Conference Report and Proceedings, RIRDC, Barton.

Emmerson, R. (2006). "Juggling ownership change." The Advertiser **50**.

EVCA (2009). Private Equity and Venture Capital in the European Economy: An Industry Response to the European Parliament and the European Commission.

Ernst & Young and Centre for Innovation and Enterprise, *Investment Readiness Study* (Canberra: AGPS 1997). (IRS)

Feeney, L., G. H. Haines Jr and A. L. Riding (1999). "Private investors' investment criteria: insights from qualitative data." Venture Capital: An international journal of entrepreneurial finance **1**(2): 121-145.

Fernando, G. D., R. A. Schneible and S. Suh (2014). "Family firms and institutional investors." Family Business Review **27**(4): 328-345.

Gallo, M. A. and A. Vilaseca (1996). "Finance in family business." Family Business Review **9**(4): 387-401.

Gasson, C. and A. Jolly (1999). Corporate Finance Handbook, Kogan Page.

Graves, P.-S. S. a. C. (2010). Understanding the Barriers to and Opportunities for Access to Private Equity: For Small-to-Medium-sized Family-owned Enterprises (SMFEs), CPA, Australia

GRDC (2014). Leasing and share farming land fact sheet, Grains Research & Development Corporation, February.

Gupta, A. K. and H. J. Sapienza (1992). "Determinants of venture capital firms' preferences regarding the industry diversity and geographic scope of their investments." Journal of Business Venturing **7**(5): 347-362.

Harrison, R. T., M. R. Dibben and C. M. Mason (1997). "The role of trust in the informal investor's investment decision: An exploratory analysis." Entrepreneurship: Theory and Practice **21**(4): 63-82.

Hicks, J., Sappey, R., Parikshit, B., Keogh, D., Gupta, R., (2012) Succession Planning in Australian Farming, *Australasian Accounting, Business and Finance Journal* **6**(4), pp. 94-110.

HIA (2015). HORTICULTURE INNOVATION AUSTRALIA LTD Consultation Paper: Determining the Strategic Investment Priorities for the Australian Horticulture Industry.

Horticulture), V. V. o. (2014). Australian Horticulture Industry Facts

Howorth, C., P. Westhead and M. Wright (2004). "Buyouts, information asymmetry and the family management dyad." Journal of Business Venturing **19**(4): 509-534.

Hutchinson, R. W. (1995). "The capital structure and investment decisions of the small owner-managed firm: some exploratory issues." Small Business Economics **7**(3): 231-239.

IFC (2012). Innovative Agricultural SME Finance Models. 2121 Pennsylvania Avenue, N.W.Washington, D.C. 20433

Johnson, J., M. Morehart, K. Poppe, D. Culver and C. Salvioni (2009). Ownership, governance, and the measurement of income for farms and farm households: evidence from national surveys. Statistics on Rural Development and Agriculture Household Income. Contributions Second Meeting of the Wye City Group.

KPMG (2006). Family businesses warned: don't cheat yourself out of retirement, KPMG Media Release.

KPMG (2014). Financing Family Business Growth through Individual Investors.

KPMG (2015). The road to riches: driving investment in Western Australian agriculture.

Lindhe, J. (2007). "Plan for the end game." Business Review Weekly: 1-4.

Mason, C. and J. Kwok (2010). "Investment readiness programmes and access to finance: a critical review of design issues." Local Economy **25**(4): 269-292.

Mason, C. and A. Rogers (1997). The business angel's investment decision: An exploratory analysis.

National Small Firms Policy and Research Conference, CRANFIELD SCHOOL OF MANAGEMENT.

Mason, C. M. and R. T. Harrison (1995). "Closing the regional equity capital gap: The role of informal venture capital." Small Business Economics **7**(2): 153-172.

Mason, C. M. and R. T. Harrison (2002). "Barriers to investment in the informal venture capital sector." Entrepreneurship & Regional Development **14**(3): 271-287.

National Producers' Federation (NFF). (2014). Farm Finance Forum: Investing in Innovative Idea, NFF Media Release, May, 2014

Oakey, R. (2007). "A commentary on gaps in funding for moderate 'non-stellar' growth small businesses in the United Kingdom." Venture Capital **9**(3): 223-235.

OHMA (2014). "Issue 8: Enhancing Agricultural Exports". Submission by the Office of Horticultural Market Access (OHMA), Submission to the Agricultural Competitiveness Green Paper, December 2014.

Poutziouris, P., K. O'Sullivan and L. Nicolescu (1997). "The [re]-generation of family-business entrepreneurship in the Balkans." Family Business Review **10**(3): 239-261.

Poutziouris, P. Z. (2001). "The Views of Family Companies on Venture Capital: Empirical Evidence from the UK Small to Medium-Size Enterprising Economy." Family Business Review **14**(3): 277-291.

PPB Advisory (2014). "A submission on Agricultural Issue Paper".

MGI (2013). Surviving Not Thriving The MGI Australian Family and Private Business Survey 2013.

Sapienza, H. J. and M. A. Korsgaard (1996). "Procedural justice in entrepreneur-investor relations."

Academy of management Journal **39**(3): 544-574.

Sapienza, H., 1992, When do venture capitalists add value? *Journal of Business Venturing*, **7**, 9 – 27.

Shepherd, D. & Douglas, E. (1999) Attracting Equity Investors: Positioning, Preparing and Presenting the Business Plan (Thousand Oaks, CA: Sage).

Timmons, J. A. and W. D. Bygrave (1986). "Venture capital's role in financing innovation for economic growth." Journal of Business venturing **1**(2): 161-176.

Upton, N. and W. Petty (2000). "Venture capital investment and US family business." Venture Capital: An International Journal of Entrepreneurial Finance **2**(1): 27-39.

Valle, H. (2014). Trends in the Australian vegetable growing industry:2005–06 to 2012–13.

Venkataraman, S. (1998). "Hostile environmental jolts, transaction set, and new business." Journal of Business Venturing **13**(3): 231-255.

Wang, Z., D. J. Leatham and T. Chaisantikulawat (2002). "External equity in agriculture: risk sharing and incentives in a principal-agent relationship." Agricultural Finance Review **62**(1): 13-24.

Warlick, K. (2012). Sourcing Equity Investments For Production Agriculture. Disclosure Materials, Hnagon Agricultural Investment Group.

WEF(2014). Direct Investing by Institutional Investors: Implications for Investors and Policy Makers, Geneva, Switzerland

Woodhead A. C., Cornish, P. S., and Slavich, P. G. (2000). Multi Stakeholder Benchmarking: Clarifying attitudes and behaviour from complexity and ambiguity. *Australian Journal of Experimental Agriculture* 40: 595-607

Woodhead A, Thomas J and Mah J (2009) *Sustainability in Supply Chains*. Australian Government Department of the Environment, Water, Heritage and the Arts. Canberra, Australia.

Wu, Z., J. H. Chua and J. J. Chrisman (2007). "Effects of family ownership and management on small business equity financing." Journal of Business Venturing **22**(6): 875-895.

Wyman, W. O. (2014). Direct Investing by Institutional Investors: Implications for Investors and Policy-Makers, World Economic Forum.

## Appendix 1 Vegetable and fruit crop potential suitability in the QMDB area

Table 4 and Table 5 outline vegetable and fruit crops that can be grown in the QMDB region and some possible limitations.

Table 4: Potential vegetable crops

Vegetable crops	Comment
Chives ( <i>Allium schoenoprasum</i> )	Heat of summer and frosts in winter will determine planting dates
Garlic ( <i>Allium sativum</i> )	
Leek ( <i>Allium ampeloprasum</i> var. <i>porrum</i> )	
Onion ( <i>Allium cepa</i> )	
Shallot (true shallot) ( <i>Allium cepa</i> var. <i>aggregatum</i> )	
Spring onion ( <i>Allium fistulosum</i> )	Perennial vegetable crop - crowns planted when dormant (May to July - first harvest in 2 years and continues for 10-15yrs).
Asparagus ( <i>Asparagus officinalis</i> )	
Beetroot ( <i>Beta vulgaris</i> )	Heat of summer and frosts in winter will determine planting dates
Asian Vegetables ( <i>Brassicas</i> ) @	Heat of summer and frosts in winter will determine planting dates
Broccoli ( <i>Brassica oleracea</i> var. <i>italica</i> ) @	High summer temperatures will restrict early plantings in the west, and cold winter temperatures will affect quality in some years.
Broccolini ( <i>Brassica oleracea</i> ) @	
Brussels sprouts ( <i>Brassica oleracea</i> var. <i>gemmifera</i> ) @	
Cabbage ( <i>Brassica oleracea</i> var. <i>capitata</i> ) @	
Cauliflower ( <i>Brassica oleracea</i> var. <i>botrytis</i> ) @	

Chinese cabbage ( <i>Brassica campestris</i> var. <i>chinensis</i> ) @	
Kale ( <i>Brassica oleracea</i> var. <i>acephala</i> ) @	Heat of summer and frosts in winter will determine planting dates
Kohlrabi ( <i>Brassica oleracea</i> var. <i>gongylodes</i> ) @	
Broad bean ( <i>Vicia faba</i> var. <i>major</i> )	Winter temperatures will determine planting and harvest dates
Capsicum ( <i>Capsicum annuum</i> )	Split season - see sweet corn
Carrot ( <i>Daucus carota</i> )	Heat of summer and frosts in winter will determine planting dates
Celery ( <i>Apium graveolens</i> var. <i>dulce</i> )	Heat of summer and frosts in winter will determine planting dates
Celeriac ( <i>Apium graveolens</i> var. <i>rapacium</i> )	Heat of summer and frosts in winter will determine planting dates
Chilli ( <i>Capsicum annuum</i> )	Split season - see sweet corn
Butternut and Jap 'pumpkin' (Grammas) ( <i>Cucurbita moschata</i> )	Mid-summer heat may restrict plantings to spring and autumn - potential for split season
Cucumber ( <i>Cucumis sativus</i> )	
Marrow/Squash ( <i>Cucurbita pepo</i> )	
Pumpkin ( <i>Cucurbita maxima</i> )	
Zucchini and Button Squash ( <i>Cucurbita pepo</i> )	
Edible Soybean ( <i>Glycine max</i> )	Summer crop only
Eggplant ( <i>Solanum melongena</i> )	Split season - see sweet corn
Green bean ( <i>Phaseolus vulgaris</i> )	Split season - see sweet corn
Lettuce ( <i>Lactuca sativa</i> )	High summer temperatures will restrict early plantings in the west, and cold winter

	temperatures will affect quality in some years.
Honeydew ( <i>Cucumis melo</i> var. <i>indorus</i> )	Mid-summer heat may restrict plantings to spring and autumn - potential for split season
Rockmelon ( <i>Cucumis melo</i> var. <i>reticulatis</i> )	
Watermelon ( <i>Citrullus lanatus</i> )	
Mushroom ( <i>Agaricus bisporus</i> )	Not affected by environment as grown in controlled environments
Okra ( <i>Abelmoschus esculentus</i> )	Split season - see sweet corn
Parsley ( <i>Petroselinum crispum</i> )	Mid-summer heat may restrict plantings to spring and autumn - potential for split season
Parsnip ( <i>Pastinaca sativa</i> )	Winter temperatures will determine planting and harvest dates
Pea ( <i>Pisum sativum</i> )	Winter temperatures will determine planting and harvest dates
Potato ( <i>Solanum tuberosum</i> )	Frosts and summer heat will determine planting and harvest times
Radish ( <i>Raphanus sativus</i> )	Winter temperatures will determine planting and harvest dates
Rhubarb ( <i>Rheum rhaponticum</i> )	Cold climate crop only
Silver beet ( <i>Beta vulgaris</i> var. <i>sicla</i> )	High summer temperatures will restrict early plantings in the west, and cold winter temperatures will affect quality in some years.



Snow pea ( <i>Pisum sativum</i> var. <i>macrocarpon</i> )	Frosts and summer heat will determine planting and harvest times
Sugar snap peas ( <i>Pisum sativum</i> var. <i>saccharatum</i> )	Frosts and summer heat will determine planting and harvest times
Spinach ( <i>Spinacia oleracea</i> )	Winter temperatures will determine planting and harvest dates
Swede turnip ( <i>Brassica napis</i> var. <i>napobrassica</i> )	Winter temperatures will determine planting and harvest dates
Sweet corn ( <i>Zea mays</i> var. <i>saccharata</i> )	++ Sweet Corn - Split Season - PLANTING - Mid Aug to late Sept; and Early Jan to mid-April; HARVEST - Late Oct to early Dec; and Late Mar to End June, due to high 'temperatures in spring and early summer adversely affecting pollination and cob quality
Sweet potato ( <i>Ipomea batatas</i> )	Frosts and summer heat will determine planting and harvest times
Tomato ( <i>Lycopersicon esculentum</i> )	Split season - see sweet corn
Turnip ( <i>Brassica rapa</i> var. <i>rapa</i> )	Winter temperatures will determine planting and harvest dates
>> - All crops require at least 20-30 mm of well drained soils  @ - Chilling requirements are met (or avoided) by agronomy and timing of production in Queensland.	

Table 5: Potential fruit crops

Fruit crops	Comment
Blueberry - Southern Highbush ( <i>Vaccinium corymbosum</i> hybrids; Rabbiteye - <i>Vaccinium ashei</i> )	Warmer climate 'Southern Highbush' and Rabbiteye varieties from the southern states of USA will grow and perform in northern NSW and Qld. The Northern Highbush types are not suited to sub-tropical regions as they have a higher chilling requirement.
Chinese jujube ( <i>Ziziphus jujuba</i> )	Varietal choice and market suitability need to be well researched .Wind breaks necessary and netting to prevent bird damage. Very tolerant to low temperature during dormancy
Desert lime ( <i>Citrus glauca</i> )	Adapted to climate of Western Qld
Lemon ( <i>Citrus limon</i> )	Lemons (except the Meyer) are more sensitive to frost than oranges.
Lime ( <i>Citrus aurantifolia</i> )	Planting citrus is not recommended in areas where heavy frosts occur regularly.
Grapefruit ( <i>Citrus x paradisi</i> )	Planting citrus is not recommended in areas where heavy frosts occur regularly.
Mandarin ( <i>Citrus reticulata</i> )	Mandarins vary widely in their frost tolerance.
Orange ( <i>Citrus sinensis</i> )	A mature tree which has hardened off may tolerate temperatures down to -5°C for a short time without being seriously affected.
Date ( <i>Phoenix dactylifera</i> )	The best date growing districts are characterised by having long hot dry summers with minimal summer rainfall
Fig ( <i>Ficus carica</i> )	Fig trees thrive in the inland areas of NSW, and can be grown in the cooler tableland areas. Young trees are very susceptible to frost damage, especially if spring frosts are

	severe. Figs do not require winter chilling to break dormancy
Grapes ( <i>Vitis vinifera</i> )	Currently grown commercially in QMDB
Loquat ( <i>Eriobotrya japonica</i> )	Post-harvest handling, transport and Marketing will be critical issues for this crop
Nashi ( <i>Pyrus pyrifolia</i> , <i>P. bretschneideri</i> and <i>P. ussuriensis</i> )	Lower chilling requirements than Pears and apples.
Olive ( <i>Olea europaea</i> )	The olive grows best, with less disease, in regions with a Mediterranean type climate, which have cool winters with a warm dry summer and autumn
Pecan ( <i>Carya illinoensis</i> )	Chilling will be achieved in most areas of the Balonne Border Rivers area of the QMDB. Deep well drained soils are essential. Flat to very gently sloping land required for harvesting and other machinery to operate efficiently and safely.
Pomegranate ( <i>Punica granatum</i> )	Mild-temperatures to sub-tropical - with cool winters and hot, long and dry summers. Rainfall in autumn can affect yields as the fruit will crack. Areas that receive regular summer rain are probably not suitable as potential production zones. Yield 20 - 25 Tonne per ha at maturity. Plant at 5m x 4 metre density
Quandong ( <i>Santalum acuminatum</i> )	Quandong in south western Queensland is at the northern extent of its natural range.
Raspberry ( <i>Rubus idaeus</i> )	Requires frost free conditions
Nectarine ( <i>Prunus persica</i> var. <i>nectarina</i> )	Only where winter chilling is sufficient
Peach ( <i>Prunus persica</i> )	
Strawberry ( <i>Fragaria x ananassa</i> )	Heat in summer and frosts in winter will determine planting and harvest dates

## Appendix 2 Investment Advisors

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